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COMMUNITY COLLEGES IN PENNSYLVANIA, A REPORT TO THE STATE BOARD OF EDUCATION.

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LEGISLATION IN 1963 AUTHORIZING THE ESTABLISHMENT OF COMMUNITY COLLEGES NECCESSITATED THIS SURVEY TO DETERMINE SUITABLE GEOGRAPHIC AREAS FOR INSTITUTIONAL DEVELOPMENT, TYPE OF PROGRAMS, AND ORGANIZATIONAL FOCUS. OF PARTICULAR CONCERN IS THE RELATIONSHIP OF EXISTING VOCATIONAL-TECHNICAL PROGRAMS AND STATEWIDE ADULT EXTENSION PROGRAMS TO COMMUNITY COLLEGE DEVELOPMENT. AN ANALYSIS OF 12 REGIONS ON A COUNTY-BY-COUNTY BASIS LEADS TO A RANKING OF 26 DISTRICTS WHICH ARE IDENTIFIED AS HAVING CLEAR POTENTIAL FOR INSTITUTIONAL DEVELOPMENT AS RELATED TO NEED, FEASIBILITY, AND COMMUNITY INTEREST. THE INCLUSION OF COMMUNITY COLLEGES AS PART OF THE STATE SYSTEM OF HIGHER EDUCATION, AS OPPOSED TO MORE TRADITIONAL TIES TO SECONDARY EDUCATION, IS INDICATED BY TRENDS TOWARD THE DEMOCRATIZATION OF HIGHER EDUCATION, THE EQUIVALENCY OF THE FIRST 2 YEARS OF COLLEGE FOR THOSE WORKING TOWARD THE BACCALAUREATE, AND THE WIDENING RANGE OF OCCUPATIONS WHICH REQUIRE COLLEGIATE PREPARATION. SPECIFIC RECOMMENDATIONS FOR ADMISSION AND TUITION POLICY, LOCAL ORGANIZATION AND RESPONSIBILITY, SYSTEM COORDINATION, STATEWIDE PROFESSIONAL STAFF UTILIZATION, FINANCING, AND IMPLEMENTING LEGISLATION ARE DIRECTED TO THE STATE BOARD AS THE RECOMMENDED COORDINATING AGENCY FOR POLICY INITIATION AND PROGRAM DEVELOPMENT. (AL)

ED012179

COMMUNITY COLLEGES IN PENNSYLVANIA

A REPORT

to the

STATE BOARD OF EDUCATION

by

Ralph R. Fields
and
Associates

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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June 30, 1965

JC 670 143

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June 28, 1965

State Board of Education
Commonwealth of Pennsylvania
Harrisburg, Pennsylvania

Ladies and Gentlemen:

I take pleasure in transmitting herewith the Final Report of the Community College Study which was conducted under contract DG-11 01-16-77-3-100-310 M E No. 1. In the Preface we have set forth the procedures used in dealing with the various areas of the investigation outlined in the contract. This may be of some assistance in relating what we have done to your expectations respecting the Study.

We are of course hopeful that the suggestions for establishing policies and initiating actions relating to the community college development in Pennsylvania will prove to be helpful. If there is any way that I can be of assistance to you in connection with the Study, please do not hestitate to call upon me.

Sincerely,

Ralph R. Fields

Ralph R. Fields
Survey Director

Acknowledgments

Any substantial undertaking requires the contribution of a great many persons. The Community College Study in Pennsylvania is certainly no exception, for it represents a great deal of cooperative effort. To attempt to name all who had a part is indeed difficult, if not impossible; to name only a few of the chief contributors poses the almost impossible task of deciding where to stop. Nonetheless, I feel that I must acknowledge my obligation to some for the essential contributions which they made.

First of all, the members of the Council of Higher Education, the arm of the State Board of Education responsible for this Study, have been of great assistance, having devoted a number of hours to discussing with the Survey Director their perceptions and attitudes regarding the development of community colleges in Pennsylvania. The Council's Chairman, Mr. Charles G. Simpson, has been especially helpful and has demonstrated a remarkable understanding of the basic issues. Of great assistance also has been the insights shared by Dr. Leonard N. Wolf, Chairman of the previous ad hoc Committee on Community Colleges of the State Board.

The members of the staff of the Department of Public Instruction have without exception shown a willingness to produce any materials available and spend whatever time appeared necessary in order to share their insights. Deputy Superintendent George Mohlenhoff, Mr. Severino Stefanon, Secretary to the State Board of Education, Dr. A. Martin Eldersveld, Special Assistant Donald Miller, and Miss Hope Kormushoff, have responded time after time to numerous requests for information and help.

The Director could not have achieved the degree of insight he did into Pennsylvania's system of higher education without the basic ideas advanced by the Advisory Committee for the Community College Study, who met regularly with him. The County Superintendents and their staffs, as well as the many school officials and community leaders who supplied basic information and suggestions, gave freely of their time upon the occasions of our visits to their counties and contributed richly to our understanding of the many and varied situations in the State. Numerous officials in various state offices were very cooperative and in many cases supplied helpful information. Officials and professors of Pennsylvania State University put various types of information and statistics at our disposal, and the Directors of the Commonwealth Campuses which we visited were unfailingly cordial and helpful. President Walker shared his views regarding community colleges in a paper delivered at an early meeting of the Advisory Committee.

It is also my privilege to acknowledge with sincere appreciation the fine work of the entire staff of the Community College Study. Hans F. Flexner as Coordinator has carried a substantial load throughout. Milton Erway, James J. Linksz and Donald H. Smith, Research Associates who carried out much of the visitation, were indefatigable in their search for data and ingenious in their analysis of priorities and potentials. Professor Walter E. Sindlinger and Professor Sloan Wayland of Teachers College, Columbia University were very resourceful as consultants in formulating the overall design of the investigation. Dr. Clyde Blocker, President of the lone community college operating in Pennsylvania at the time of the Study, was never too busy to share information gained from his first-hand experience in starting the Harrisburg Area Community College; in addition, he prepared an extensive memorandum regarding organization, finance and legislation which was extremely helpful because of the thoroughness of his analysis.

And finally, the meticulous attention to secretarial functions given throughout the Study by Dorothy Flexner was largely responsible for the uniform excellence in this aspect of the Report.

To all these my sincere thanks for their contributions, but I must hasten to add that for the shortcomings of the Study I must shoulder full responsibility.

Ralph R. Fields,
Survey Director

Harrisburg, Pennsylvania
June 1965

Preface

On September 29, 1964, the State Board of Education entered into a contract with Ralph R. Fields and Associates to carry out a study leading to a State Plan for Community Colleges in Pennsylvania. A long series of prior investigations, surveys, proposals, publications, and proposed legislative bills, had finally culminated in the passage by the General Assembly of the Community College Act of 1963. The fundamental provisions of this act were summarized in the document itself:

> [AN ACT] Providing for the creation, establishment and operation of community colleges, granting certain powers to the State Board of Education, the Council of Higher Education and the Department of Public Instruction; authorizing school districts, county boards of school directors and municipalities to sponsor community colleges; authorizing school districts and municipalities to levy certain taxes, providing for reimbursements by the Commonwealth of certain costs and expenses, and making an appropriation.

The concept of the community college envisioned by the General Assembly, as well as some of the problems engendered by the very nature of the legislation, are contained in the definition of "Community College" set forth in Section 1, (4) of this legislation:

> "Community College" shall mean a public college or technical institute which is established and operated in accordance with the provisions of this act by a local sponsor which provides a two year, post-secondary, college-parallel, terminal-general, terminal-technical, out of school youth or adult education program or any combination of these. The community college may also provide area vocational technical education services to secondary senior high school students.

There had been numerous earlier attempts in Pennsylvania to inaugurate plans and provisions for public two-year colleges. More than two hundred years ago Benjamin Franklin encountered difficulties in his attempt to establish an "English" branch in his Academy, devoted to the vernacular, modern languages, and occupational courses. Franklin argued that the Latin branch failed to prepare, or even to admit, students who need such education for practical reasons. Perhaps Franklin's experience was prophetic of the long period of frustration that has been endured by the proponents of community college education in Pennsylvania.

Prior to 1963, a long list of efforts had come to naught: the Koos and Martorana study, A Community-College Plan for Pennsylvania, sponsored by the Joint State Government Commission in 1948; the 1957 report of the Governor's Commission on Higher Education; the 1961 report of the Governor's Committee on Education; and the 1963 report of the Governor's Committee of One Hundred for Better Education, Community Colleges for Pennsylvania, to cite the more recent efforts.

Following the 1963 legislation, community college developments have occurred rapidly. The new State Board of Education, especially its Council of Higher Education, and the staff of the Department of Public Instruction, have accomplished an amazing amount of organizational and promotional work in implementing the legislation. While a major share of these tasks has lodged this past year in the Bureau of Community Colleges, both the Council of Higher Education and the Deputy Superintendent for Higher Education have been involved almost constantly in the development of community college education for the past two years.

In a comparatively brief period of time, Guidelines for Preparing Applications for the Establishment of the Public Community Colleges, Criteria for the Establishment of Community Colleges, and Standards, Rules, and Regulations for Public Community Colleges in Pennsylvania, were prepared with the assistance of Professor Norman Harris of the

University of Michigan for consideration by the State Board of Education. Revised formulations of these have been adopted by the Board and have been issued by the Department of Public Instruction in printed form as two documents, entitled, Standards, Rules and Regulations for Public Community Colleges in Pennsylvania and Guidelines for the Establishment of Public Community Colleges in Pennsylvania. These documents are clear and very comprehensive, giving to potential community college sponsors a great deal of information and many suggestions regarding the establishment and operation of two-year colleges.

Six colleges have been approved by the State Board of Education in accordance with the legislation and the Board's regulations: Bucks County Community College, Butler County Community College, Harrisburg Area Community College, Montgomery County Community College, Philadelphia Community College, and Williamsport Area Community College. Harrisburg Area Community College, the first one approved, has been in operation during the present academic year, 1964-65.

In the revised Guidelines a succinct statement of the purposes of the community college appears:

> Simply stated, the basic purpose of the community college is to make education beyond high school (academic, occupation, and general) available at low cost, at readily accessible locations throughout the state, to as many youth and adults as can profit from the instruction.

This purpose is expanded into five objectives, as follows:

1. To make two-year college education available at low cost to students in their own locality.
2. To provide regular full-time students with a broad program of studies leading to various educational and occupational goals, including education for transfer to four-year colleges

and universities, for semi-professional occupations, for skilled occupations, and developmental programs for educational improvement.

3. To provide these same opportunities for part-time day and evening adult students.

4. To provide effective guidance and counseling services for both regular and part-time students so that every student may make the most of his potentialities.

5. To provide a program of community services in specialized and general education, and in cultural and economic development.

In accordance with authorization by the General Assembly for a study to develop a state plan for community colleges, the Board engaged Ralph R. Fields and Associates. In the contract, the aspects of community college education to be covered in the Community College Study were set forth in some detail, and have provided guidance in organizing and implementing the Study. The scope of the investigation was defined as follows:

a. Obtain information necessary to assist the Board to determine those areas where the need for and feasibility of establishment of comprehensive community colleges is most urgent and practical.

b. Conduct surveys to determine the type of educational programs most urgently needed by the various areas in which community colleges are proposed.

c. Make recommendations on the relationship between proposed community colleges and existing institutions of higher education.

d. Suggest plans and policies for the coordination and inter-relationship of community colleges, technical institutes and area vocational-technical schools.

e. Make recommendations for legislative action, either initial or amending the present community college act, which would facilitate the development and operation of a Statewide system of community colleges.

f. Prepare interim and final reports of findings and recommendations on all of the above items as required by the Board, and assist in the preparation for publication of any such findings and recommendations which the Board may desire to distribute Statewide or nationally.

In addition to the Community College Study, two other studies pertaining to higher education in Pennsylvania and one regarding vocational-technical education clearly related to the community college development in the Commonwealth, had been authorized by the Legislature. These were a Master Plan Study to be made by the Academy for Educational Development, a Study of State Colleges by Professor Earl J. McGrath of Teachers College, Columbia University, and A Survey of Vocational-Technical Education by Donald D. Dauwalder and Associates.

The Survey Director has maintained contact with the directors of the other studies and members of our staff have conferred with staff members of the Master Plan Study upon several occasions. While in some ways it has been unfortunate that the Community College Study preceded the Master Plan Study, the pressure of events in the State with reference to community college education made it imperative that the Community College Study be prosecuted without delay if it was to have any substantial effect on the early development of public two-year colleges. It is of course hoped that the findings and recommendations contained in this Report will be of assistance to those who are conducting the Master Plan Study, and Mr. Sidney Tickton, the Director of that undertaking has indicated upon several occasions that this would be so and that serious attention would be given to all the problems of the community college as a part of the higher education system of Pennsylvania.

The other two studies have now been completed and the reports have been used by the Community College Study staff at appropriate times during the later stages of our work. Further reference to the findings and recommendations of these surveys will be found in subsequent sections of this Report.

A word about the nature and scope of the activities undertaken by our staff in conducting the Community College Study is in order here. Very early in our work we identified a number of basic issues and established various procedures. We recognized immediately the need for gathering rapidly as much pertinent information as we could in order to have the fullest picture possible of Pennsylvania -- a very large state with many and varied activities, developments, and problems. In the first few weeks we conferred widely with numerous state officials in Harrisburg -- too many to acknowledge here by name as we would prefer doing, for we found every person contacted not only gracious but eager to render every assistance. Among the state agencies contacted were: the Bureau of Employment Security of the Department of Labor and Industry, the Department of Internal Affairs, the Department of Commerce, the State Planning Board, and the State Tax Equalization Board.

During this same period a number of educational leaders outside of Harrisburg were visited. Particularly important among these early contacts were those with Pennsylvania State University officials regarding the University's Commonwealth Campuses, especially those with Mr. S. K. Holderman, Dr. J. R. Rackley, and Dean M. E. Campbell. A visit with Dr. John Geise of the University of Pittsburgh concerning the Regional Colleges of that University was equally helpful. Through visitations and conferences and through intensive library work, a wide variety of publications and reports was collected and digested. While we would be the first to acknowledge the impossibility of becoming fully acquainted with a large state in such a brief time, we believe that we were able to identify many of Pennsylvania's economic, geographic, cultural, and educational activities, past and present, that have an important bearing on the future of community college in the Commonwealth.

Of great help in the entire Study have been the meetings with the Advisory Committee appointed by the State Board of Education in accord with the legislative provision for the Community College Study. In the letter which went to the persons invited to serve on this committee the following paragraph is indicative of the important function it was to serve:

> In order to give this study as broad and representative a background as possible, we are asking a number of outstanding persons from various public and private sectors of the Commonwealth to join us as members of an Advisory Committee for the study. The committee would serve as the source of ideas regarding the study itself -- what it might embrace, issues that should be considered, persons who might be helpful or knowledgeable. The committee might also serve as a sounding board for general recommendations evolving from the study. Members of the committee would undoubtedly be well-qualified interpreters of the master plan and of the activities of the Department of Public Instruction and the State Board, as these relate to the plan.

The following people served on the Advisory Committee:

Dr. Harvey A. Andruss, President, Bloomsburg State College

Dr. Clyde E. Blocker, President, Harrisburg Area Community College

Mr. Harry Boyer, President, Pennsylvania AFL-CIO

Mr. Robert E. Eiche, Director, Altoona Commonwealth Campus, Pennsylvania State University

Dr. Eugene Farley, President, Wilkes College

Dr. Althea Hottel, Chairman, City of Philadelphia Commission on Higher Education

Dr. Harry K. Miller, President, Keystone Junior College

Dr. Carl A. Newman, Supervising Principal, Gateway Union School District

Mr. Gilmore B. Seavers, Administrative Assistant to the President, Shippensburg State College

Mrs. Norman B. Shain, League of Women Voters of Pennsylvania

Dr. Earl F. Sykes, President, West Chester State College

Mr. George Walton, Executive Secretary, Pennsylvania Association of Colleges and Universities

In addition, three members of the Department of Public Instruction, Mr. George Mohlenhoff, Drs. A. Martin Eldersveld and John Struck, sat with the committee throughout, as did two members of the Council of Higher Education, Dr. Leonard Wolf and Mr. Gail Rose.

Regular and extensive contact with the Council of Higher Education has been most valuable throughout the Study. This has been accomplished through attendance at their meetings when appropriate, through attendance at several hearings held by the Council at which community college education and its problems were under study, and through several conferences with Mr. Charles Simpson, the Chairman of the Council. Throughout the Study great assistance has been provided by the frequent and lengthy sessions with members of the Department of Public Instruction. Mr. George Mohlenhoff, Mr. Donald Miller and Dr. A. Martin Eldersveld have been involved throughout the year; Dr. George W. Hoffman, Acting Superintendent, has rendered assistance whenever it was needed and was particularly helpful by establishing a climate of cooperation in number of divisions and bureaus. A great deal of valuable information and interpretation has been received from a wide range of officials, among them Dr. Neal V. Musmanno, Deputy Superintendent for Instruction, Dr. John Struck, Director of the Bureau of Vocational, Technical and Continuing Education, Dr. Donald N. Carroll, Jr., Director of the Curriculum Development Bureau, and Dr. Carl D. Morneweck, Director of the Bureau of Statistics.

The first phase of the Study was culminated by the issuance of our Preliminary Report followed by wide discussion -- officially with the Advisory Committee, the Council on Higher Education, the State Vocational Committee and the Advisory Committee to the Master Study Plan, and also with individuals such as Department of Public Instruction personnel and the directors of the other three studies. All of these discussions added to the depth of our understanding.

The next several months were spent in collecting, analyzing, and interpreting data about the various regions and counties of the Commonwealth with respect to their needs for, interest in, and capacity to support community colleges. Much helpful information was contributed by the county superintendents of schools, who completed a questionnaire dealing with their 1964 high school graduates. A significant contribution was made by the county superintendents and their staffs, various public school officials, community and business leaders. Associates of the Community College Study visited in practically all of the 67 counties. First-hand contacts proved to be tremendously helpful, not only in verifying the accuracy of summaries prepared prior to the visitations, but in uncovering additional developments, testing our interpretations of data, exploration of the advantages and disadvantages of alternative proposals, and the like.

Finally, the organization and writing of the present Report has occupied the staff during the month of June. Associates who visited all or parts of the various regions prepared preliminary summations and proposals; the entire staff discussed each of the regions in order to reach a concensus regarding alternatives and priorities. This process has, we feel sure, eliminated a good many appealing but unfeasible potential developments and has, in addition, led to the refinement and expansion of analyses of important issues and problems. The Survey Director and the Coordinator have shared the final responsibility for producing and editing the Report. The Survey Director must of course assume the full responsibility for the recommendations and for the quality of the analyses throughout the Study. As noted in the Acknowledgments, several consultants in addition to the Study staff have participated at various points of the Study, but the Director has assumed throughout that the final responsibility has been his.

Contents

Page

Letter of transmittal i

Acknowledgments iii

Preface vii

Contents xix

Section I. The potential role of community colleges in Pennsylvania 1

- A. The community college idea 3
  - Evolution of the community college idea 3
  - Growth 5
  - Diversity 9
  - Common purposes 14
  - Characteristics of community colleges 16
    - Accessible 16
    - Comprehensive 19
    - Community-centered 20
    - Life-long learning 22
    - Adaptable 23
- B. The need for community colleges in Pennsylvania 26
  - Economic and social needs 26
  - Pennsylvania's population 31
  - Occupational needs 33
  - Community college enrollment projections for Pennsylvania 37
    - Various methods of projecting college enrollments 37
    - Enrollment potentials for Pennsylvania's community colleges 39

C. Relationship of community colleges to other educational institutions in the State 47

  Relationship to other institutions of higher education in Pennsylvania 47

    Private institutions 48

    State colleges 49

    Pennsylvania State University 51

    Off-campus extension centers 54

  Relationship to vocational education 58

    Criteria of the professions applied to other occupational levels 62

Section II. Community college possibilities and priorities by regions and counties 73

A. Introduction 75

  Procedures and data 75

  Criteria 78

    Local needs 79

    Enrollment potential 79

    Availability of other higher institutions in the area 79

    Accessibility 80

    Financial support 80

    Community interest 80

  The twelve geographic regions 81

B. Analysis of potential community college areas 85

  North West Region 85

    Potential community college enrollment 86

    Erie-Crawford-Warren 87

    Mercer-Crawford 90

Venango-Clarion-Forest 92

North Central Region 95

Williamsport Region 99

Lycoming and cooperating counties 99

Bradford-Susquehanna-Tioga-Wyoming 103

North East Region 107

Luzerne-Columbia-Schuylkill-Carbon 107

Lackawanna-Wyoming-Susquehanna-Wayne-Pike-Monroe 109

Western Region 113

Beaver County 113

Lawrence County 114

Beaver-Lawrence 116

West Central Region 121

Jefferson County 121

Clearfield County 121

Centre County 122

Huntingdon County 123

Blair County 123

Cambria County 124

Cooperative ventures 124

Clearfield and Centre counties 125

Cambria County 126

East Central Region 129

Lehigh Valley Region 133

Lehigh County 135

Northampton County 136

    - Lehigh Valley Community College 137
    - Advantage of each alternative 138
    - Conclusion 140
  - South West Region 143
    - Allegheny County 143
    - Washington-Greene 145
    - Fayette-Greene 146
    - Westmoreland-Fayette 146
    - Indiana-Armstrong 148
  - South Central Region 151
    - Franklin-Fulton 152
  - Capitol Region 155
    - Dauphin-Perry-Cumberland (Harrisburg Area Community College) 155
    - Lebanon 156
    - Lancaster 157
    - York-Adams 158
  - South East Region 161
    - Bucks County 161
    - Montgomery County 163
    - Philadelphia 163
    - Chester County 164
    - Delaware County 165
  - Areas with high community college potentials 167

C. Summary of priorities for community colleges in Pennsylvania 169

Section III. Essentials for developing a state system of community colleges in Pennsylvania 173

A. State organization and control 175

Introduction 175

The role of the State Board in relation to community colleges 178

Role of the professional staff of the State Board in relation to community colleges 184

The role of the boards of trustees of local community colleges 187

The role of the community college president 192

B. Local organization 195

The present sponsorship system 197

A proposed community college district alternative 202

Selection of the board of trustees 203

Faculty considerations 205

C. Finance 208

Basic support for operating costs 208

Ability of the districts to support community colleges 208

Student tuition 209

Non-resident tuition fees 210

Capital outlay 211

State and local shares 211

Method of funding capital outlay 212

State reimbursement procedures 213

Operating costs on a current basis 213

Funds for capital outlay 214

Board procedures for reviewing community college budgets 216

Other financial issues 217

D. Legislation 220

Additional legislative items 220

The State Board and legislation 222

E. Programs, faculty and facilities 224

Instructional programs and facilities 224

The library -- an educational materials center 227

Guidance activities and admissions policies 229

Faculty 231

Section IV. Recommendations 235

A. The State Board's role in community college development 237

Policy making 237

Policy implementation 241

Coordinating functions 244

B. The professional staff at the state level 247

Role of the professional staff 247

Size and qualifications of staff 249

C. Relationship of community colleges to Pennsylvania's system of higher education 251

Community colleges' relationships with four-year colleges and universities 251

Community colleges and off-campus extension centers 253

D. Finances 256

E. Educational programs, facilities, and faculty 258

F. Legislation 261

Eligibility to attend community colleges 261

Legislation regarding local colleges 263

Financial items 265

Facilities 267

Faculty 269

Non-conversion to 4-year status 269

Appendices

Appendix A - Population data by counties A-1

Appendix B - Selected demographic factors by county A-3

Appendix C - Selected economic factors A-5

Appendix D - Projection of full-time enrollment potential for community colleges, 1966 through 1974, based on Formulas "A", "B" and "C" A-7

Appendix E - Projection of full-time, part-time, and total enrollment potentials for community colleges, 1966 through 1974, based on Formula "A", "B" and "C" A-19

Appendix F - Number and percent of 1964 high school graduates who entered colleges and universities and other post-secondary institutions A-29

Appendix G - Ability of counties to finance community colleges A-31

Appendix H - Possible additions to local budgets and county tax rates if part-time programs are instituted A-35

Appendix I - Estimates of state reimbursements to community colleges for operating expenses and capital outlay based on amortization plan, 1965-66 through 1968-69 A-38

Appendix J - Estimates of amounts needed yearly for state reimbursement on a cash basis for community college capital outlay, 1965-66 through 1968-69 A-43

Appendix K - Enrollments in off-campus extension centers, Fall 1964 A-47

Tables

Table 1 Pittsburgh standard metropolitan statistical area, employment by major industrial groups, 1952-1962 29

Table 2 Total population, United States and Pennsylvania, 1950 and 1960, and components of change (in thousands) 32

Table 3 Percent change in employment, by major occupation groups, United States and Pennsylvania, 1950 to 1960 34

Table 4 Estimated labor needs for selected occupations in the Philadelphia labor market area, November 1962 and 1967 35

Table 5 Minimum community college enrollments in Pennsylvania, 1965 to 1974 45

Table 6 Estimates of amounts needed yearly for State reimbursement on a cash basis for community college capital outlay 1965-66 through 1968-69 214

Table 7 Estimates of State reimbursements to community colleges for capital outlay 1965-66 through 1968-69, based on amortization plan 215

Maps

Pennsylvania by regions 83

(1) North West Region 84

(2) North Central Region 96

(3) Williamsport Region 100

(4) North East Region 106

(5) Western Region 112

(6) West Central Region 120

(7) East Central Region 128

(8) Lehigh Valley Region 134

(9) South West Region 142

(10) South Central Region 150

(11) Capitol Region 154

(12) South East Region 162

Proposed community college areas 168

SECTION I

THE POTENTIAL ROLE OF COMMUNITY COLLEGES IN PENNSYLVANIA

A. THE COMMUNITY COLLEGE IDEA

The term "Community College" in the United States connotes different ideas to different people. One reason for this is that the community college movement itself has so many varied manifestations. To some the term is simply a new name for the junior college, with its emphasis on making transfer programs available locally. To others it may mean a college with technical and semi-professional programs. To some it merely implies community control. For still others it connotes offerings for adults.

The remarkable thing is that to some extent each of the above concepts is true. One can find local institutions called community colleges which offer only academic programs parallel to the first two years of the university. One can find a few such institutions with emphasis only upon occupational preparation, and even a few which attract largely adults. But the interpretation of the term community college which is coming to have the most common meaning is one which embraces all of these variants as functions of a local college dedicated to the needs of the people of its geographic area, its community.

To make sure that the concept of the institution which is the subject of this report is fully understood, let us examine the community college idea in somewhat greater detail: first in terms of the evolution of the idea, then in terms of the growth and diversity of institutions, and finally in terms of the purposes and the characteristics of the community college today.

Evolution of the community college idea

The American junior college was an early expression of the community college idea. It was clearly an extension of the American belief in education as beneficial to as many as are able to take advantage of it. The community college as we know it today is a direct outgrowth of the development of the public junior college. Between 1907 and 1930 these two-year institutions took their place alongside the free elementary schools, the free American high schools, the land grant colleges, and the public state teachers college and the state universities. This local two-year institution was clearly an attempt to bring the advantages of higher education within the reach of all.

The junior college movement was fostered primarily by two groups of educators. A small but important group of university leaders perceived the junior college as an essential innovation in higher education. They backed the idea because it tended to relieve overcrowded universities of the large numbers of students seeking admission. They also saw the junior college as an instrument for the democratization of higher education. As a result in the early history of the junior college universities generally accepted the graduates of junior colleges as transfers into their upper division programs, commonly giving full credit for courses which were parallel to their own offerings.

The other protagonists of the local college idea were the public school administrators, most commonly the high school principal or superintendent. Their ideas were supported by lay people who desired additional college opportunities for their children and who were essentially committed to the belief that public education should be extended upward.

Frequently state leadership was helpful, but the vigorous push was from the university leaders and local school administrators.

The public junior colleges during the first forty years of the twentieth century made three important contributions to American higher education:

1. They epitomized the idea of college opportunity made available at the local level to as many high school graduates as were interested and capable.

2. They proved that their graduates could succeed in the upper divisions of four-year colleges and universities.

3. They pioneered in offering college instruction for preparation for new occupations.

The community college idea embraces these junior college concepts and adds two more -- that of offering higher educational opportunities to individuals of all ages and interests, and that of improving its community through the medium of educational planning -- that is, bringing the concept of educational planning to bear on community needs. Before dealing further with these concepts, however, it is appropriate to note the growth of the two-year college movement, and to note its diverse manifestations.

Growth

It is not the purpose of this report to trace at great length the growth of the community college in the United States. Rather, it is to note the general nature of the development, and then to seek some understanding of why such institutions developed in certain states or regions and why they did not develop in others, notably the Northeast and Middle Atlantic states, including Pennsylvania.

The general growth of junior colleges can be noted most authentically through the official reports of the U. S. Office of Education. Briefly, between 1917 and 1963, some 46 such institutions multiplied into 577, and the enrollment grew from roughly 4,500 to over 771,000. These included all such institutions, both public and private. The growth of the public two-year college was even more spectacular: from fourteen institutions enrolling a little over one thousand (1,367) students in 1917-1918, to some 360 attracting over 690,000 enrollees in 1963. Even though all higher education enrollments were increasing tremendously during this time (from 597,880 in 1920 to 4,800,332 in 1963), the two-year college growth was even more dramatic.

The growth of two-year colleges tended to occur much more extensively in some states than in others. The early rise of public junior colleges took place mostly in certain states in the West, Mid-West, and Southwest; notably in California, Washington, Colorado, Texas, Oklahoma, Minnesota, Missouri, Michigan, Illinois, Iowa and Kansas. Mississippi and Georgia were the only states outsides these regions to show an early development of public two-year colleges.

Some rather common characteristics among these states are worth noting. First, in practically all of them, the predominant pattern of higher education before 1930 was that of public, state-supported colleges and universities. In most of them there were, in the twenties and thirties, relatively few private institutions of higher education. Second, early in this century at least, all of these states were sparsely settled. With the exception of upstate Illinois, they tended to be predominantly rural. Automobile transportation rather than well-developed railway systems tended to characterize them. Third, perhaps less clearly identifiable as distinquishing these states from others in the United States, there tended to be a strong belief in public institutions as major instruments of social improvement. Fourth, the influence of the state university, and, in at least two cases, the backing of influential private institutions (the University of Chicago and Stanford University) added great weight to the cause. University support was particularly effective in California, Illinois, Michigan and Texas, the states which developed the public junior college most vigorously as a primary institution for meeting public needs. In contrast, other state universities (Wisconsin, Indiana, and Pennsylvania, for instance) developed off-campus centers which, by fulfilling some of the same functions as the early junior colleges, served as substitutes for them and hence actually prevented any development of public two-year colleges.

In the early development of the public junior college movement, then, certain states seemingly needed such institutions as an indigenous part of their systems of higher education, and, with the hearty backing of the university officials, junior colleges flourished. In a few additional states, such as Arizona, Idaho, Utah, Montana, Nebraska, North Dakota, etc., the need was apparently met by the relatively few public junior colleges which were established.

In numerous states very few or no public junior colleges were established, and it is worth looking at these states to see if there are common characteristics among them which might throw light on why this was so. Those coming to mind first are the New England states of Maine, Vermont, New Hampshire, Massachusetts, Rhode Island and Connecticut and the Middle Atlantic states: New Jersey, Pennsylvania, Maryland and Delaware. In New York a few state two-year agricultural institutes were founded, but no local colleges. Ohio and Indiana stand out among the Midwestern states as having no junior colleges. In the Southern area Alabama, Virginia, West Virginia, Kentucky, North Carolina, South Carolina, Arkansas, Tennessee, and Louisana saw practically no development. This was also the case in Oregon and New Mexico in the West, South Dakota and Wisconsin in the Mid-West.

The only common characteristic observable regarding most of these states is driven home if on an outline map the public and private institutions of higher education are plotted in different colors. Certain regions are clearly dominated by private colleges: the New England and Middle Atlantic states, Ohio (and to some extent Michigan and Illinois) and the Southern states. These are the older states. Development of higher education in them followed historical precedents and if junior colleges developed at all they tended to be private institutions. Thus, very few public institutions were founded in these states.

No other common characteristic seems to emerge, but the action of a few universities in establishing off-campus centers explains the absence of local two-year colleges in a few of the states outside the private college regions (Indiana and Wisconsin), as well as in Pennsylvania.

This analysis can close with a brief examination of the current expansion of community colleges. Several states, such as Florida, Arizona, and North Carolina, which had developed a few such colleges, are now engaged in expanding them into a state system. New York is slowly evolving a pattern out of the hodgepodge of state agricultural and technical institutes, the experimental technical institutes started in 1946, and the local community colleges which have been founded under the 1950 Community College Act. Maryland in the late 1940's developed several county community colleges.

Other states started after World War II, or are just now getting started: Massachusetts, New Jersey, Rhode Island, Pennsylvania, Ohio, and Oregon.

Two conclusions seem justified. A majority of the states now have, or have started action to develop, public community colleges as a part of their systems of higher education, although some fifteen states still have no provisions. Second, state authority, or at least some provisions for orderly development supervised by the state, is much more in evidence now than during the early years of the movement.

Diversity

Many different types of junior colleges have been founded, but when they are considered in broad perspective the first major differentiation is between the private and the public institutions. Private junior colleges have and will continue to perform essential educational services in Pennsylvania. However, since we are concerned primarily with public community colleges we will concentrate on them in this report.

Chief variances are in terms of size, control, type of students, and type of programs offered. A few words regarding these are in order, for the variety is important in considering questions regarding the potential of the community college for Pennsylvania.

In size, the junior colleges range from very small (less than a hundred students enrolled) to very large (over 24,000 individuals enrolled in some type of course work). The very small institutions tend to be private, single purpose colleges. The last enrollment figure immediately brings up one of the problems associated with variation in size: the difference between full-time student enrollment and total enrollment (which includes the part-time students, both credit and non-credit). A look at the average enrollments for all types of junior colleges in the fall of 1962 and 1963 show this differentiation:

Type of Junior College	Average Total Enrollment (1963)	Average Full-Time Enrollment (1962)
All two-year colleges	1,300	605
Public community colleges	1,870	738
Independent junior colleges	417	288

Source: Calculations from enrollments reported in The Junior College Directory, 1964.

These figures show that full-time students comprise a bit less than half of the total enrollment in the public two-year colleges, and a somewhat greater proportion of the enrollment in the private junior colleges. We also perceive that the public colleges tend to be much larger than the private ones, whether one considers the total enrollment or the full-time student enrollment. Indeed, it is this larger size that enables the public colleges to enroll roughly ninety percent of the total enrollment in two-year colleges, even though they only comprise some two thirds of the number of colleges reported in the 1964 Junior College Directory, (422 of 694).

Large institutions are an important aspect of the community college movement. California alone has some 15 campuses with 10,000 or more students on each. Los Angeles, with seven campuses, enrolled over 73,000 students. Chicago, with nine campuses, reported close to 30,000 students; New York City, with seven campuses had over 20,000 students. In each of these cities, the public community college constitute an important element in its system of higher education.

Furthermore, as noted, the public community colleges, and particularly the larger ones, are serving more and more adults thru their diversified programs.

The diversity with respect to organization and control of the public community colleges can be briefly highlighted. There are four basic types of organization and control:

The State

> For instance, the New York State Agricultural and Technical institutes. Usually some type of advisory committee exists in order to give the locality an avenue through which to register at least its desires.

Local political sub-divisions

> A County
>
> > As an example, the Orange County Community College, New York, which is sponsored and supported by the Orange County Board of Supervisors. A Board of Trustees exists and has the responsibility of day-by-day operation of the College, within the budget and the regulations established or adopted by the Board of Supervisors.
>
> A City
>
> > The New York City community colleges, which are under the jurisdiction of the New York City Board of Higher Education (recently changed to the Trustees of the City University of New York), which in turn is sponsored and supported by the City of New York.

A local school district

> In California, for instance, many of the community colleges are organized as a part of either a city school district or a high school district.

A junior college or community college district

> These are independent of any school district or any political sub-division, and have their own taxing and bonding power. Many of the California two-year colleges are of this type, and recent legislation in that state provides that all new community colleges must be independent districts.

As the community junior colleges of the country have become larger in size and more complex in their problems of support and governance, the independent community college district has become increasingly preferred because of its flexibility and its stable support. Since it represents an entity devoted solely to developing and maintaining the college for its unique purposes, it is generally felt to be a more effective governing instrument and more responsive to the needs of the community college.

With respect to students, two-year colleges differ to some degree. For instance, some public junior colleges enroll only regular students, most of them directly from high school; e.g., one study revealed that in 1958-59 there were 224 such institutions (out of a total of 400) which did not enroll any special students, and some 202 which did not enroll any adults. A few (6) did not enroll any full-time freshmen or sophomores. But the majority of community colleges are characterized by a wide range of students -- in age, in academic status and ability, in interests, and in goals. An intensive study of several such community institutions revealed the following characteristics of students;

> ...There are, within each of these community colleges, students with high academic abilities and the intention of pursuing college work for baccalaureate degrees in the arts and sciences. Many of these students will take graduate work and prepare themselves for careers in the learned professions. They have come to the junior college with the same drives and expectations exhibited by students of like caliber in liberal arts colleges and universities. They need the same subjects and a quality of instruction and challenge similar to that of the lower division in four-year institutions. But unlike students in the liberal arts college or university, they are not exclusively representative of the community college. Students who wish to pursue careers of professional work are also to found there. Some of them may have an intellectual ability equal to that of ordinary four-year college students; others may not, but they will have the interest and ability necessary to complete the program which leads to the realization of their ambitions. Therefore, it is again no suprise to find that they achieve lower scores on academic aptitude and achievement tests than do the students in four-year colleges and universities, and that the average academic

> ability also is considerably lower. In general, those students who aspire to transfer to four-year colleges at the end of two years will average close to the norm for all college students; those who are in terminal occupational programs will average considerably lower.
>
> The age of the students in community colleges covers a wide range. Mature adults are found not only in the adult or evening divisions but in the regular day classes as well....
>
> As would be expected, the large majority of adults attending community college are employed workers or housewives. In addition, a heavy proportion of day students are found employed in part-time work, in this way earning an appreciable part of the cost of their college education.
>
> In summary, no significant differences in the general characteristics of students in these four community colleges have been identified. The students have been reported as earnest and serious; they range broadly in terms of abilities, interests, and purposes, but since the programs they pursue in the community colleges vary in terms of their demands, the range in ability can be accommodated.*

To some extent the instructional programs in community colleges resemble each other, and to a considerable extent parallel those of four-year colleges. This is true because community colleges tend to duplicate the typical college program in the arts and sciences of the first two years. To do so is almost a matter of necessity since a substantial proportion of the community college graduates transfer to four year colleges and universities and earn their bachelor's degrees.

In other respects, however, the community colleges vary a great deal in their programs. For instance, some have developed their own general education programs, and, as with their four-year sister institutions, this leads to considerable variation. Courses in communication arts and skills, community or social problems, history of western civilization, mathematics of every day living, general biology, general physical science, health and hygiene, general courses in the arts and the humanities, etc., in various forms are to be found in different institutions. In this regard, however, the transfer function of the community college has tended somewhat to keep the development of distinctive general education programs to a minimum.

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*Fields, The Community College Movement, pp. 249-50.

It is in the area of career preparation that the community colleges have developed their greatest variation, and understandably so. The differences in regions and among communities in the same region with respect to economic life tend to encourage such differences. Perhaps the most effective way of illustrating the wide range of occupational offerings is to list the "Terminal or Semi-professional Curricula" used in the 1960 edition of American Junior Colleges as classifications of such programs:

General Education
Agriculture
Architecture
Art
Aviation, Flight
Building Trades
Business Education, General
Dental Laboratory Technician
Drafting
Electricity, General
Engineering
Forestry
Home Economics
Journalism
Mechanics, General
Mechanics, Auto
Mechanics, Aviation
Medical Laboratory Technician
Medical Secretary
Metal Work
Music
Nursing, 1-year
Nursing, 2-year
Physical Education
Radio & TV Technician
Recreational Leadership
Salesmanship
Secretarial
Social Service
Teaching, Elementary
Woodworking

In addition, a wide variety of career programs were reported by a small number of colleges in each instance. A five-page supplementary listing appears with such titles as "Advertising," "Cartography," "Chemical technology," "Coal mining," "Data processing," etc.

In sum, because of the very nature of the movement, no two community colleges should necessarily be exactly alike, yet they do have some common purposes which tend to make them similar in some respects.

Common purposes

As public junior colleges developed over the years, they tended to take on the responsibility of fulfilling a wide range of purposes pressed upon them by the communities which they served. It was this broadening of purposes which was responsible for the transition of an increasing number of public two-year institutions from junior colleges, offering transfer programs and a restricted list of career programs, to community colleges, charged with fulfilling a wide range of community needs. Seven such purposes or functions have come to be recognized as appropriate for community colleges:

1. The offering of programs of general education suitable for the wide variety of students in attendance.
2. The offering of transfer programs in the arts and sciences.
3. The provision for specific career programs.
4. Making available to the adults of the community a variety of programs of higher education.
5. The inauguration of appropriate developmental programs to assist students in overcoming academic difficulties.
6. The provision of guidance services for the youth and adults of the community.
7. The performance of community services appropriate for an institution of higher education within the community.

Not every institution labeled "community college" will be in a position to fulfill completely all seven of these functions. Yet these purposes flow out of the functional needs of community members which have to be met in some effective manner. In truth, it is the existence of these needs in the communities of the United States which is responsible for the dramatic growth of community colleges throughout the land. The dedication of the community college to meeting these needs is its most significant difference from other institutions of higher education --

none other is so dedicated.

Characteristics of community colleges

As two-year public colleges have striven to evolve effective programs to meet community needs, they have developed certain characteristics that tend to mark them off from four-year institutions. These characteristics are of the utmost importance to the community college development in Pennsylvania, for they serve as demarcations for the proposed community colleges for this commonwealth.

Those institutions which warrant the name "community college" tend to be accessible, comprehensive, community-centered, dedicated to lifelong education, and adaptable. Each of these characteristics is worth a brief comment in order to put more specific meaning into these somewhat general terms.

Accessible

Accessibility to an ever-increasing proportion of community members is certainly a primary characteristic of community colleges. One county official, participating in the dedication of a new community college in an Eastern state, was quoted in the newspaper accounts of the ceremony as having declared that this institution "would become the Harvard of the community colleges." To the extent that he may have meant high quality of attainment in whatever was undertaken, well and good; to the extent that he may have meant exclusiveness, however, he was in reality denying the primary purpose for the founding of the institution he was dedicating.

To attain community college status, an institution must first of all be accessible geographically. If students can not get to it, the college can not serve them. This has come to mean more and more commonly a college within reasonable commuting distance of a majority of the citizens to be served.

Geographic accessibility as a goal for a college-level institution brings in its wake certain problems, however. One is the problem of size; in sparsely settled regions a college without dormitories may enroll so few commuting students that the educational offerings will tend to be too meager for modern demand. The college may also be so small that it cannot afford or attract an adequate faculty. Because of these dangers, intelligent planning with respect to location is of the utmost importance within a state.

Another problem is that while the college may be geographically accessible to the students, it may be hampered by parochial attitudes which limit the range of the college's education activities. This need not be, for community colleges even though regional institutions must take their place among the institutions of higher education to which they belong. This means that the vision of the local college must transcend the specifics of the locality. Otherwise, community colleges would be headed for inevitable inferiority.

Accessibility is also related to the social morass and the personal attitudes and experiences of the population being served. Many studies have revealed that social attitudes among parents and students create serious barriers to college attendance. This is particularly true in families in which the parents identify with semi-skilled or unskilled occupations and reflect the attitudes of the lower socio-economic group. In spite of this problem, the public community college seems to be demonstrating great power in attracting students of moderate and below-average socio-economic status. While cost is a critical factor and will be dealt with immediately below, social attitudes are to a degree separate from economics. Individuals from homes where neither parent has gone beyond elementary school or the lower high school years see their classmates planning to attend the local college, and they increasingly become motivated to go to college themselves. Consequently, the student body of the local college is becoming more and more representative of the community-at-large. For America, this is of the utmost importance.

Cost is an essential matter as well. Community colleges can generally offer more economical higher education to students than do many other types of colleges. First of all, many are tuition free; all tend to be considerably lower with respect to tuition than sister institutions, especially the private colleges. To fulfill their mission, community colleges must keep their tuition quite low.

Another major cost of college attendance frequently is that of room and board away from home. The locally accessible college enables many to attend while living at home, and in many cases this represents the difference between going and not going to college. Furthermore, community college students tend to be working students: a high proportion work part-time while attending college, and even a greater number work during the summer and other vacations.

All in all, community colleges provide the opportunity for students to attend college in the most economic manner possible.

And finally, community colleges are accessible academically to a wide range of students. They are non-selective in philosophy because it is their function to provide an appropriate variety of educational opportunities and programs to increasing numbers of students.

Academic accessibility needs further analysis, however, for there is danger of possible misunderstanding regarding nonselective admissions. The community college admissions policy, frequently called "open-door," must be realistically related to the programs offered by each institution. The "open-door" is to the institution and to certain specific programs. Students with poor admissions credentials will have to earn their admission to some programs by demonstrating capabilities in developmental, preparatory programs. Just as four-year colleges, community colleges cannot afford to squander limited resources on demonstrably poor risks. The community college is no panacea for academic difficulties; it can only offer reasonable opportunities to overcome them through remedial instruction.

The community college, then, aspires to be democratic not only in its purposes but in its operations -- it strives to be geographically and socially accessible to young and old, economical in cost, and nonselective in its overall admissions policies.

Comprehensive

The second characteristic enumerated earlier in this section of the report was that of comprehensiveness. The necessity for being comprehensive is easily perceived in relation to being accessible. If a community college is going to serve a large proportion of its community, it has to embrace a wide range of purposes, develop the breadth of program essential to fulfill their needs, and evolve the ability to deal with the wide range of students thus attracted.

The wide range of purposes commonly ascribed to community colleges -- general education, transfer courses, career programs, adult opportunities, developmental or remedial instruction, guidance services and community service -- have been set forth previously. While each institution cannot hope to fulfill all such functions equally well, it must show the willingness to venture in new directions. Frequently this means developing new programs for specific ends, and the comprehensiveness of the community college curriculum results. A warning is important in this regard -- if there is no program suitable for the student, it is no favor to admit him. A comprehensive program of instruction is a community college must.

But comprehensive purposes and programs, essential as they are, will not be complete unless the institution develops the ability to serve students with a wide range of abilities. In short, the community college must be able to deal with the brilliant, on the one hand, and the not-so-brilliant on the other. Variation in program must be matched with appropriate variation in teaching. Traditionally-effective college instruction must be supplemented with new media and new methods -- individualized instruction, mass media, programed learning, seminars, credit by examination, field work, internships -- and future improvements not yet envisioned. The road to learning may not be royal, but it must be made more and more traversable for an ever increasing number and variety of students. This is a mission of the community college.

Community-centered

To observe that a community college must be community-centered could be considered trite or obvious. But the term connotes important concepts for the institution.

First of all, the community college should be supported and controlled by its local community. This does not mean to the exclusion of state or other support, but it means the community should participate substantially in financing the institution. Nor does it mean that the state government should not set minimum standards and general regulations -- after all, the final responsibility for education in this country rests with the fifty states. But local support and local control mean that the college is responsive to the needs of the region; the college is created to serve the community and its members.

In a sense, the community college represents a blending of three major interests or approaches to college opportunities. As an institution of higher education, the community college must accept a certain heritage: the obligation to promote truth, to lift vision through liberal education, to stimulate the development of wisdom based on understanding. To accept less responsibility than this is to fail its responsibility to society.

To a degree the interest of the state in chartering any college coincides with the concepts of higher education in general; but the state also has some specific interests that go beyond these. The state is concerned about the behavior of its citizens as citizens; it is desirous of benefitting from the preparation of civic leaders; it is interested in having the trained professional, semi-professional, technical, and skilled workers needed in its business, industrial, educational and governmental enterprises. It therefore must participate in the support and supervision of the collegiate institutions within its borders in order to guarantee that these needs are met.

And finally, the community represents certain interests, desires, and attitudes. Sometimes these are parallel or identical with those from higher education, for the local college personnel are dedicated to these goals and they aid the community in defining the role of the local college.

Sometimes the interests are parallel to or identical with those of the state, for the community is a part of the state. But community needs frequently are more specific; these too must be embraced by the community college. And thus it is that community colleges, although a part of higher education and a part of the state system of higher education, sometimes differ from other state institutions and the private colleges because they are serving the requirements of a particular region or community.

Life-long learning

The education of adults has become increasingly important in our complex civilization, and many agencies have been created to meet the mounting demands. Community colleges will not, indeed must not, supplant agencies already performing educational services for adults. But the community college represents for a sizeable proportion of the adult population the only institution of higher education geographically accessible to it. It is the combination of the community college's accessibility and its qualities as an institution of higher education that make it peculiarly important as an instrument of adult education. It does not take too great a stretch of imagination to see the community college as the modern-day successor to such movements as the Lyceum, Chattauqua, Workers' Education, Continuation Education, Agricultural Extension, University Extension, Literacy Education, Adult Education, and the Liberal Education of Adults. Where these functions are still carried on by appropriate and effective agencies, so be it. But where they are not, the community-serving college may well be the educational agency to organize and administer the needed program. Furthermore, as a part of its community services function, it may well be the institution which can look at the community as a whole and help the community to plan for its own improvement through educational undertakings. The dedication to life-long learning means more to the community college than simply the offering of typical college courses for adults, important as that function may be. It means education utilized for community improvement and the betterment of community members' lives.

Adaptable

Our final common characteristic flows of necessity out of the other four. If the community college is accessible, people will bring to it their changing educational needs. If the community college is comprehensive, it has to adapt to embrace new programs. As communities change they meet new problems, and many of these problems will merit the attention of an institution centered on community needs. And as adults move through life encountering new and changing demands, the institution dedicated to fulfilling the life-long needs of community members will have to initiate programs and services to help in the quest of solutions. Hence, the community college is different in some respects from the junior college of yesterday, and the community institution of tomorrow will be different in some respects from the community college of today. Institutions adapt or they are superseded.

For Pennsylvania, the community college idea seems to offer substantial help in meeting its present and future needs in the realm of higher education. Pennsylvania already has well-developed facilities in higher education to serve the able students with money who can attend its private colleges. The superior students who are qualified to attend state aided universities are well served. Those interested in the four-year progra[illegible] of liberal arts and/or teacher education offered by the state colleges and qualified for admission, are well provided for.

What is lacking are facilities to serve certain groups with specific goals:

(1) Students who are capable and who wish a quality education but who cannot afford the tuition and living expenses of state aided universities or the private universities and colleges. Community colleges with high quality arts and science programs for transfer students would enable a considerable number of this group to commence their college careers in an economical fashion, one they could afford.

(2) Those who want some higher education to enhance their lives as individuals and as citizens of the Commonwealth. Accessible community colleges with general education programs developed for this purpose might prove both attractive and effective for many of these persons who may not wish four years of expensive college education.

(3) Those who lack the ability for professional education or the interest to undertake four years of collegiate arts and sciences, yet who could qualify for one of the semi-professions with two years of community college education focused on career preparation and accompanied by general education adjusted to their interests.

(4) Adults who need readily accessible opportunities for continuing education as a means of increasing their enjoyment of life, as citizens wishing to understand fully the problems of the society in which they live, or as workers trying to advance in their callings or forced to prepare themselves for new occupations because of the changes which are occurring with increasing rapidity in our economic life.

These appear to be groups with pressing needs which community colleges are serving effectively in many of the states today. In order to assess the potential role of such community colleges for Pennsylvania, however, the factors that will determine that role need to be examined and the roles of other types of institutions of higher education need to be identified and related to the community college potentials.

B. THE NEED FOR COMMUNITY COLLEGES IN PENNSYLVANIA

Needs differ both in kind and in importance. The needs of the individual, for instance, are many and varied; Pennsylvania's needs and the needs of the regions and communities within the State are just as numerous and diverse. Essentially, institutional arrangements represent an organized attempt, a concerted effort, to provide a better context for the satisfaction of human needs. On his part, the individual has a responsibility to himself and to the larger community to bring to bear such abilities as he may possess and such knowledge and wisdom as he may aquire through full access to the most appropriate and highest level of education and training consisent with his and society's abilities and needs.

In this part of the report, economic, social, and individual needs are first examined and then viewed opposite the enrollments projected for the state and its counties.

Economic and social needs

Economic growth, closely linked to scientific and technological advancements, requires an increasing supply of appropriately educated and trained personnel. Appropriate, that is, to meet the needs of Pennsylvania's changing economy.

During the eighteenth and nineteenth centuries the state's economy was based very largely on its abundant natural resources. Employment opportuntles in mining, agriculture, and lumbering were plentiful. Gradually, however, these sources of employment declined in importance. Even advanced agricultural methods were inadequate to support the rural population of Pennsylvania's

Appalachian region. As other sources of power began to supplant coal, and with the mechanization of the mines, employment dropped off sharply. Similarly, the depletion of the state's timber was reflected in a marked decline of the lumber industry. More recently, however, the forests are being regenerated and the state now owns about 12% of the forest land.

As the older industries declined, manufacturing, trade, and services increased in importance. Manufacturing, the single most important source of employment in Pennsylvania, accounted for 33.2% of the total labor force in 1940 and increased to 36.4% in 1960. The change in the state's economy is also reflected in the Department of Internal Affairs' 1960 estimated personal income, which reveals that by far the greatest proportion of wages and salaries were paid to manufacturing employees, followed, in order, by employees in wholesale and retail trade, in government, in services, in transportation, communication, and public utilities, in construction, in insurance and real estate, in mining, and in farming. The trend is brought into sharper focus when seen in actual figures, which show that 1960 wages and salaries for manufacturing were some $7,454,000,000 in contrast to $71,000,000 for farming and $305,000,000 for mining -- about 1% and 4%, respectively, of the manfacturing income.

In 1960, 6.0% of the state's total labor force was unemployed; in February of 1965, the figure had dropped to 5.8% -- enough, according to the classificatory system developed by the U. S. Bureau of Employment Security, to move the state from the "relatively substantial" to the "moderate" category. It should be pointed out, however, that the unemployment figure for 1965 is for a particular month, February. Throughout the year, this figure changes according to seasonal unemployment, to the large influx of high school and college students seeking summer employment, and other factors. Thus two months earlier, in December of 1964, the state's unemployment had dropped to 4.8% of the total labor force; in February of 1964, or just one year earlier than the 5.8% figure, 7.7% of the labor force was unemployed. Since the general factors affecting unemployed are similar for February 1964 and February 1965, the change from 7.7% to 5.8% is noteworthy.

Unemployment may vary greatly from one Labor Market area to another or from one county to another. For example, the Philadelphia Labor Market Area, consisting of eight counties, five in Pennsylvania and three in New Jersey, employed some 1,543,500 workers in 1962. Of these, 1,319,100 -- or 85.9% -- were employed in the five counties of Pennsylvania included in the Market Area -- Bucks, Chester, Delaware, Montgomery, and Philadelphia. Some 6% of the Area's total labor force was unemployed in 1962; by February 1965, that figure had dropped to 5.8%. The similarity to the state mean, discussed above, is not surprising, since employment in the Area represents over 40% of the state's total employment.

The state's second largest economic area, the Pittsburgh Standard Metropolitan Statistical Area, includes Allegheny, Beaver, Washington, and Westmoreland Counties. A listing of nine major industrial groups in the Area reveals that during the 1952-1962 period employment decreased in six of the groups and increased in three:

Table 1

PITTSBURGH STANDARD METROPOLITAN STATISTICAL AREA, EMPLOYMENT BY MAJOR INDUSTRIAL GROUPS, 1952-1962

Groups	1952	1962	Change 1952-1962
Services	91,200	123,100	+31,900
Government	60,200	76,600	+16,400
Finance, Insurance, and Real Estate	28,400	32,200	+3,800
Farming (Estimated)	11,600	9,400	-2,200
Wholesale and Retail Trade	154,500	148,300	-6,200
Construction	43,200	36,900	-6,300
Mining	26,400	9,200	-17,200
Transportation and Public Utilities	76,700	55,600	-21,100
Manufacturing	346,800	266,900	-79,900

Constructed from statistics tabulated by the Bureau of Employment Security, Pennsylvania Department of Labor and Industry.

By February of 1961, 13.8% of the labor force was unemployed. During a few months in 1962 unemployment dropped to about 9%, and by February of 1964, the figure was 7.8%. A year later unemployment dropped to 4.7%, and the Area's classification was changed from "substantial and persistent" to "moderate" unemployment. As indicated above, these classifications tend to fluctuate.

Unemployment also varies greatly from county to county. In 1960, it ranged from 2.4% in Montgomery County to 13.1% in Fayette County. This is not surprising since Montgomery is above the mean for the state in manufacturing, construction, trade, and services and below the mean in agriculture, mining, transportation and communications. Fayette illustrates the effects in one county of the sharp decline in bituminous coal mining. As the nation's economy became increasingly less dependent on coal as a source of power, production of coal and employment in mining decreased. The decline, accompanied by important technological changes, was felt by the railroads, which had themselves failed to participate in the nation's growth of the transportation industry.

Such changes in the economies of certain areas and counties within the state are reflected in the disturbance of entire communities and have serious implications for higher education. Diversification of the economic base has been suggested as one important possibility leading to economic growth. The attraction of new industries and the expansion of old ones call for technical and managerial skills and knowledge. Recent studies of the problem suggest that since industrial development programs are not likely to meet the total needs of the state and the affected communities, the training and retraining of both new and older workers should be encouraged. Moreover, new firms locate in communities that are attractive to and meet the needs of both prospective employers and employees. Thus available services are an important consideration -- and among these services the provision of various kinds and levels of education is a major one.

Pennsylvania's economic status has improved over the past year or two and promises to continue its pattern of growth. Surveys and studies are completed or underway in a number of regions, counties, and municipalities of the state, all aimed at economic and social improvement. The March 1965 Manpower Review, issued by the Pennsylvania Department of Labor and Industry, revealed that 44 of the state's 45 labor market areas showed a decline in unemployment, in some instances quite significant.

In sum, while the economic shifts mentioned at the outset -- from agriculture and mining to manufacturing, trade, and services -- have great relevance for all of higher education, changes within the state, and in fact within the counties and communities comprising the state's economic areas, are of special concern to the potential community colleges in their efforts to meet the needs generated by such changes.

Pennsylvania's population

The changes in economic activities noted above were accompanied by a redistribution of Pennsylvania's population. Agriculture, coal, and oil require great space, whereas manufacturing, trade, and services do not. Hence while the average density of the population in Pennsylvania is about 250 persons per square mile, it varies from about 16,000 persons per square mile in Philadelphia to 10 persons in the north central part of the state. According to the Bureau of the Census, more than 70% of the state's population is now urban. Of the remaining 29% rural population only about 10% or 11% is actually farm population, situated primarily in the Appalachian Plateau and in the rich farm lands of Lancaster, York, and Adams counties.

The way in which the state's population is distributed is an important factor in community college planning. Career needs of potential students often vary according to the occupational demands of their social and economic environment. Moreover, since community colleges are in most cases "commuter colleges," accessibility is a major consideration in locating feasible sites.

Pennsylvania's population is dynamic insofar as it has increased over the years. While it is true that more recently the rate of increase has been slower than it was in the previous century, it continues to be steady. This is shown in Table 2.

Table 2

TOTAL POPULATION, UNITED STATES AND PENNSYLVANIA, 1950 AND 1960, AND COMPONENTS OF CHANGE (in thousands)

	Total population		Estimates of Components of Change			
	April 1950 (Census)	April 1960 (Census)	Net Change	Births	Deaths	Net Total Migration
U. S.	151,325	179,323	+27,997	40,947	15,610	+2,660
Penna.	10,498	11,319	+821	2,440	1,144	-475

Source: U. S. Department of Commerce, Bureau of Census. Preliminary Estimates of the Components of Population Change by State: 1950 to 1960. Current Population Reports, Pop. Est., Series P. 25, No. 227, 1961.

A closer look at the components of change in Table 2 reveals the magnitude of the state's outmigration. It is true that the outmigration is more than balanced by the natural increase in population (births minus deaths). However, the migrant group includes a significant portion of the 18-44 age group, i.e., the productive age group. A decrease in the population of this group has the immediate effect of removing an important manpower source from the labor market; it also reduces the size of the group from which the college population is drawn.

In 1950 the Bureau of the Census listed 604,345 18-21 year olds; a decade later, in 1960, there were 527,099 -- a drop of 12.8%. The decrease in the number of 18-21 years olds is striking. It underscores the fact that Pennsylvania's population growth is mainly in the under 15 and over 45 age groups.

The outmigration of the productive age group has been attributed to lack of employment opportunities, which is no doubt the case. But it is reasonable to suppose that low-cost appropriate occupational training and adult education would keep a significant number of this age group in the state, where it could be prepared to fill jobs in the new and expanding industries and services that are necessary for the state's economic growth. In this regard, occupational training and adult education are two of the major functions of the community college. Because of its collegiate atmosphere, general education offering, low tuition, and accessibility, the community college provides students with both the incentive and the opportunity to continue their education beyond their initial expectations. Thus it frequently stimulates enthusiasm for further learning while it serves the immediate needs of its students.

Occupational needs

The economic and social changes alluded to above have greatly increased the demand for competent workers. Not only has the required level of competence been raised substantially, but the number of occupations which call for skilled and knowledgeable persons has also increased at a remarkable rate.

Table 3 shows the change in employment among the major occupational groups in the United States and in Pennsylvania between 1950 and 1960. In both the state and the nation, professional and technical workers show the greatest rise in employment. Clerical and service workers are in second and third place in Pennsylvania as well as in the United States.

In contrast to these three occupational groups, note the sharp decline in employment among farmers, farm managers, and farm laborers. The drop in employment among nonagricultural laborers, while not so severe, is nonetheless significant.

Table 3

PERCENT CHANGE IN EMPLOYMENT, BY MAJOR OCCUPATION GROUPS, UNITED STATES AND PENNSYLVANIA, 1950 TO 1960

Occupation	Percent Change, 1950-1960 Penna.	 U. S.
Professional, Technical, and Kindred Workers	34.1%	47.0%
Clerical and Kindred Workers	20.3	33.8
Service Workers, Except Private Household	19.7	26.7
Sales Workers	13.1	18.7
Private Household Worker	.7	22.3
Craftsmen, Foremen, and Kindred Workers	- .9	11.8
Managers, Officials, and Proprietors, Except Farm	- 4.4	7.4
Operatives and Kindred Workers	-10.7	6.4
Laborers, Except Farm and Mine	-21.1	- 9.6
Farmers and Farm Managers	-35.9	-41.9
Farm Laborers and Foremen	-37.7	-40.2

Source: Bureau of the Census, U. S. Department of Commerce.

The U. S. Department of Labor estimates that growth in the professional and technical groups will increase more than 40% during the present decade, proprietors and managers more than 20%, clerical and sales workers nearly 30%, and service workers about 25%.

In general, occupations which attract and employ a rising proportion of workers also require more than the average amount of formal education. The average number of years of school completed by those employed in 1959 ranged from 16.2 years for the professional and technical groups to 8.6 years for farmers and farm workers.

Those concerned about and involved in the future of the state's system of higher education need to be knowledgeable in regard to the broad occupational trends delineated above. This is true of all higher educational institutions, including of course the community colleges. But beyond this, community college planning requires more detailed knowledge and understanding of local and area needs. Reference to one of the state's areas mentioned earlier will serve to illustrate this point (Table 4).

After the State's Bureau of Employment Security had projected manpower needs to 1970, it concluded that major deficits in the supply of workers would exist, as they have in the past, in the professional, semi-professional, technical, and skilled categories. In light of the state's more recent economic growth and indications that this growth will continue at an accelerated pace, there is every likelihood that manpower needs projected earlier will be substantially exceeded.

The semi-professional and technical occupations warrant special attention. There is a very close functional relationship between these groups and the professional groups; consequently, the education of the technician is becoming increasingly more rigorous. Educational programs in these and other occupational areas have long been offered in numerous community colleges throughout the nation, institutions uncommonly well-suited to perform this function.

In this connection, New York State's experience may be of value. In some respects New York is more like Pennsylvania than are any of the other states. New York has a comparatively large number of private colleges and universities, typical of the eastern part of the United States. Although the state has had plans relating to higher education for some time, little was done on a statewide basis until the 1950's. Even then, lack of adequate facilities kept college enrollments from increasing at a more rapid pace.

Table 4

ESTIMATED LABOR NEEDS FOR SELECTED OCCUPATIONS IN THE PHILADELPHIA LABOR MARKET AREA, NOVEMBER 1962 AND 1967

Occupation	Employed Nov. 1962	Expansion & Replacement Need Accumulated to November 1967
PROFESSIONAL AND SEMI-PROFESSIONAL	94,649	21,834
Accountant and auditor	10,148	1,970
Buyer, purchasing agent or store department head	9,126	1,603
Manufacturing	1,853	283
Wholesale and retail trade	4,619	698
Other nonmanufacturing	2,654	622
Draftsman	6,313	1,611
Laboratory technician or Professional assistant	26,876	5,421
Chemical technician	5,312	1,093
Electronics technician	3,662	638
Other engineering and physical science aides	6,314	953
Medical technician	4,248	1,361
Other technicians	7,340	1,376
Nurse, registered	12,593	5,163
Programmer, data processing	3,779	1,097
CLERICAL AND SALES	275,616	69,574
Bookkeeper, cashier, teller	23,935	6,021
Clerk, accounting	12,535	2,715
Clerk, general industry	9,414	2,130
Clerk, general office	65,869	17,139
Data processing	8,477	2,333
Key-punch operator	4,112	1,514
Machine operator	4,365	819
Office machine operator	5,996	1,354
Sales clerk	23,243	5,011
Salesman, salesperson	32,186	5,163
Manufacturing	10,671	1,636
Wholesale trade	4,335	801
Retail trade	5,698	1,235
Finance, ins. and real est.	8,960	1,007
Other nonmanufacturing	2,522	484
Secretary and stenographer	34,985	11,400
Typist or clerk-typist	26,112	9,384

Source: Bureau of Employment Security, Pennsylvania Department of Labor and Industry, 1962.

Now, however, the Regents' statewide plan for expanding and developing higher education in New York (The University of the State of New York, State Education Department, Albany, January, 1965) has this to say:

> The Regents wish to give the strongest possible support to both the State University Board of Trustees and the local boards of trustees in their efforts to improve and further develop these institutions /community colleges/. The community colleges, forming the fourth main sector of The State University of New York, are of critical importance. They serve the other three sectors through their college transfer programs. They serve the community in the fields of health, business, industry, and government. Finally, they provide opportunity for large numbers of students who, for economic or other reasons, must find post-secondary education within commuting distance of their homes.
>
> The development of comprehensive community colleges under the program of State University is of such importance to the total effort in higher education that the Regents issued, during the past year, a policy statement in strong support...

The policy statement expressed above is the end product of several earlier plans and of experience acquired over many years, and especially during the past decade.

Community college enrollment projections for Pennsylvania

Many factors affect college enrollments. But all enrollment projections are based on certain assumptions, even though they may be implicit rather than stated explicitly. The assumptions pertinent to the development of community colleges in Pennsylvania are carefully considered in the following pages. First, however, it would be useful to look briefly at some of the procedures for projecting enrollments.

Various methods of projecting college enrollments

College enrollments can be projected in a number of ways. In each case, however, the projected enrollments are based on a selected group, or population, that bears a definite relationship to college attendance. One such group, widely used, consists of the 18 through 21 year olds. While many people either older than 21 or younger than 18 attend college, there are more people enrolled in college (as full-time degree credit students, discussed below) from this age group than from any other. For this reason the 18-21 age group is generally designated as the "college-age group," or "college-age population." Similar relationships have been established between 18 year olds and entering college enrollments, 18-19 year olds and community college enrollments, high school graduates and entering college enrollments, cumulative high school graduates (the total number of high school graduates over a 4-year period) and college enrollments, and still others. By means of such relationships, generally expressed as percentages, it is possible to estimate the probable size of one population (college students) on the basis of another (18-21 age group, high school graduates, etc.).

The term "college enrollment" also needs examination. Some students attend college only one evening each week, while others may be enrolled in several classes, each of which meets daily. The former are usually referred to as part-time, and the latter as full-time students. For bookkeeping and planning purposes, a full-time student is customarily enrolled for a specified number of credit hours, perhaps 15 (based on the amount of time actually spent in class plus, in most instances, additional hours of preparation out of class). Thus college enrollments may be either full-time -- the number of students enrolled for the specified number of credit hours or more -- or they may be part-time -- the number of students enrolled for fewer credit hours. At times it is useful to include both groups under the term "total college enrollments" (full-time and part-time combined).

Reference to degree credit enrollments indicates that the students in this group are enrolled in work leading to a degree -- associate, bachelor's, or higher. Degree credit enrollments may be either full-time or part-time.

For the purpose of this report, Pennsylvania community college projections are made in terms of full-time degree credit enrollments. Full-time degree credit students are identifiable, comparable data relating to them are available, and they comprise the basic group used for estimating cost, full-time faculty, physical facilities, and other potential needs. Part-time degree credit enrollments are calculated as a percent of full-time degree credit enrollments.

Enrollment potentials for Pennsylvania's community colleges

Estimates of potential enrollments vary according to the assumptions on which they rest. Thus at times new estimates of enrollments may be projected on the basis of the same assumptions that supported earlier projections. The resultant figures are status quo projections; in essence they assume that the conditions which influenced the earlier projections still prevail and will continue to hold for the period under consideration.

Actually, however, in many cases conditions do change, or corrections of earlier projections would be unnecessary. Thus enrollments are also projected on assumptions that recognize the potentials for change within a dynamic society. In fact, projections are frequently based on deliberate plans for expanding educational opportunities. An increasing number of states have examined their systems of higher education as a prelude to coordinated and intelligent planning. The New York State Regents' plan, for example, calls for an increase in total full-time community college enrollments of over 125%, or 40,300 students, between 1964 and 1970.

Full-time enrollment projections for each of Pennsylvania's 67 counties --set forth in Appendix D -- involve a number of assumptions. High school graduates were chosen as the most satisfactory population for projecting full-time degree credit enrollments because the two groups are closely related to one another, the former serving as the source for the latter. Part-time students will be considered separately at a later time.

It was assumed that a gradual decline in the state's outmigration, accompanied by an increase in the holding power of the secondary school, would add an additional 1% annually to the number of students who would graduate from high school during the next ten years. Pennsylvania's efforts to achieve economic growth, to attract new industries and to expand existing ones, and the effectiveness of these measures in retarding and eventually in reversing the state's substantial outmigration, are expected to have an impact on the number of students who remain in school. Moreover, new industries create increasing demands for semi-professional and technical personnel. The availability of readily accessible, low-cost education designed to prepare individuals for employment in such industries should serve as a further incentive to students to obtain the high school diploma as a prerequisite for entering an appropriate post-secondary institution. Based on these assumptions, Pennsylvania's high school graduates would number 165,416 in 1966, 178,120 in 1970, and 194,175 in 1974.

The community college full-time enrollment potentials given in Appendix D are based on the assumption that these institutions would be in operation by the fall of 1965; naturally, colleges actually established after the date will achieve their enrollment potentials at correspondingly later dates. Full-time enrollments were estimated according to three formulas. Formula "A" assumes a modest initial enrollment and a small but steady annual increase. Formula "B" assumes a moderate initial enrollment and a larger annual increase for the first five years, after which the percent of high school graduates who enter college remains stable. Formula "C" assumes both a substantial initial enrollment and a fairly large annual increase. The three formulas, explained in greater detail in Appendix D, yield these enrollment potentials for the Commonwealth:

Year	Formula "A"	Formula "B"	Formula "C"
1970	45,459	64,507	77,773
1974	55,207	71,382	96,156

These totals represent three estimates of statewide potentials; they might be said to represent minimum, moderate, and optimistic projections. No one of the formulas will apply to all of the counties. A number of factors are involved in determining which of the three formulas is the most appropriate one for a particular county. Which particular formula is the proper one depends upon the conditions in the area which the specific community college is expected to serve. This may be a county, a part of a county, or several counties. And in order to determine the most feasible area, or district, for community colleges, it is necessary first to examine the relevant data for each county -- including, of course, potential enrollments.

It may be, for example, that the financial ability of a particular county would not be considered adequate to support a community college under present provisions even though other data might indicate a need for such a college. Or, perhaps, a county might have considerable financial ability but insufficient enrollment potential. These factors need to be considered in the formation of community college districts, as must such additional matters as accessibility, other higher institutions, established patterns of cooperation or obstacles to cooperation, and the like.

The determination and application of the most appropriate formula, or combination of formulas, for the establishment of specific community college districts is the burden of Section II of this report. Before turning to that section, it is necessary to deal with another assumption or set of interrelated assumptions, that bear directly on the needs of individual students.

The discussion of the idea of the community college, in Section I, emphasized the several senses in which "accessibility" is used in the present study. While all are important to the notion of a community college, three are especially pertinent to this discussion. Geographic accessibility is perhaps the most common interpretation of the term. But it makes little difference whether or not a college is readily accessible by car or even by foot if its doors are closed to the applicant. And it must be stated that the doors of a good many of Pennsylvania's present higher institutions are in fact closed.

The state colleges, the only publicly owned post-secondary institutions in the State, have in many instances closed their doors because there simply is not enough space to accommodate additional students. Several state colleges had already rejected more than a 1,000 students each by May of this year. In one of these colleges, some 49% of the rejected students were in the third fifth of their high school graduating class. Another state college, to mention only one other case in point, had to turn away more than 1,000 students;

the average combined score on the Scholastic Aptitude Test (hereafter referred to as SAT) of the College Entrance Examination Board attained by these students was 800. In fact the average combined SAT scores attained by students admitted to these colleges is rapidly approaching 1,000. The rise in admission requirements is not necessarily undesireable -- _if_ it does not result in serious disadvantage and waste to student and state alike. Considering the kind of student rejected last year and again this year, there is very good reason to assume that a substantial and increasing number of these students should attend a community college.

Essentially the same situation prevails at Pennsylvania State University and its Commonwealth Campuses. For admission to bachelor's degree programs the two main criteria are scores on the Scholastic Aptitude Test of the College Entrance Examination Board and rank in the high school class. SAT scores that are considered acceptable for a student in one of the five-fifths of his class are not considered acceptable for a student in another of the five-fifths of his class. Moreover, SAT score requirements differ for science and non-science majors. The SAT scores required for each of the five-fifths for admission to the bachelor's degree programs follow:

H. S. Fifth	SAT Score: Science Major*	SAT Score: Non-Science Major*
1st	900	750
2nd	1000	850
3rd	1100	1000
4th	1200	1150
5th	1300	1300

The following SAT scores for the various high school fifths for students to be admitted to the associate degree (AA) program are:

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*These figures were checked with the director of one of the Commonwealth Campuses who also served as a member of the Community College Study Advisory Committee.

H. S. Fifth	SAT Score*
1st	700
2nd	750
3rd	850
4th	900
5th	1000

The cost to the student is another important factor in making higher education available. In 1963-64, the following average student charges were set by Pennsylvania's higher institutions:

Category	Tuition	Room + Board
Pennsylvania State University and Commonwealth Campuses	$ 525	$ 765
State Colleges	300 to 400+	612
State-Aided Institutions	1,109	825 to 916
Nonstate-Aided Institutions	1,038	756 to 809
Private Junior Colleges	670	888 to 936

These are the 1963-64 charges; costs throughout the nation have risen sharply during the past several years and promise to continue to rise.

Higher education can hardly be considered accessible to students who can not afford to pay the required tuition and other charges. There is a definite correlation between per capita income (see Appendix C) and college attendance, which must be considered in the establishment of community colleges.

One final word regarding accessibility. Unless the educational offering of an institution is broad enough to meet the educational requirements of its students, be those requirements liberal or occupational -- and the distinction is not always an easy one -- it does not satisfy the needs of its students. And these students include of course both women and men, those attending part-time as well as those attending full-time, adults as well as

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*These figures were checked with the director of one of the Commonwealth Campuses who also served as a member of the Community College Study Advisory Committee.

youth -- and adult education is the most rapidly growing segment in higher education.

The above assumptions concerning needs govern the choice of the formula (s) considered most appropriate for the specific community college districts discussed in Section II.

It will be recalled that earlier in this discussion the enrollment potentials for the entire State were given for 1970 and 1974. These were established by the process of adding up the projections for each county for these years. While this is probably the most dependable method of calculating the potential need, it does not give us a practical estimate of enrollment expectations for the next ten years. In the attempt to show realistic expectations more clearly, in Table 5, we present the full-time,

Table 5

MINIMUM COMMUNITY COLLEGE ENROLLMENTS IN PENNSYLVANIA, 1965 to 1974

Year	H. S. Grads.	Freshmen	Sophomores	Full-Time Enrollment	Part-Time Enrollment	Total Enroll.
1965	173,747	2,755	--	2,755	276	3,031
1966	165,414	6,617	1,378	7,995	1,599	9,594
1967	160,914	9,655	3,309	9,964	3,986	13,950
1968	160,999	12,880	4,828	17,708	10,625	28,333
1969	174,314	15,688	6,440	22,128	17,702	39,830
1970	178,119	17,812	7,844	25,656	25,656	51,312
1971	180,264	19,829	8,906	28,735	28,735	57,470
1972	187,578	22,509	9,915	32,424	32,424	64,848
1973	186,881	24,295	11,255	36,550	36,550	73,100
1974	194,172	27,184	12,148	39,332	39,332	78,664

Sources and explanation: High school graduates were calculated as explained in Appendix D. Freshmen enrollments were calculated as 2% of 1965 high school graduates, 4% of the graduates in 1966, 6% in 1967, 85 in 1968, and thereafter increasing 1% annually from 1969 through 1974. Sophomores were calculated as one-half of the previous year's freshmen enrollments. Full-time enrollments represent the combined freshmen and sophomore enrollments. Part-time enrollments were calculated as 10% of the full-time enrollments in 1965, 20% in 1966, 40% in 1967, 60% in 1968, 80% in 1969, and the equivalent of full-time enrollments from 1970 through 1974.

part-time, and total enrollments by years, based on a modest but steady expansion of community college facilities. These might be labeled the absolute minimum projections if Pennsylvania is to develop community colleges in even modest numbers. Our conviction is that these projections will be exceeded right from the start.

C. RELATIONSHIP OF COMMUNITY COLLEGES TO OTHER EDUCATIONAL INSTITUTIONS IN THE STATE

As noted in the Preface, this is one of four concurrent studies dealing with higher education in Pennsylvania. Two of these have been completed and have been available for study.

The suggestions made by Professor McGrath regarding over-all state relationships have been given serious consideration and have been helpful in formulating the section dealing with state college-community college relationships. The study by Mr. Dauwalder concerning vocational education has been carefully analyzed, and recommendations made by him bearing either directly or indirectly on the functions of community colleges have been given attention. In the subsection of the present report devoted to the relationship between community colleges and the vocational programs of high schools and area technical vocational schools, reference is made to pertinent portions of the Dauwalder report; in the final section on recommendations we allude where appropriate to agreements and divergencies between the Dauwalder report and the present study.

It is assumed, and the assumption has been reinforced by several observations by the Director of the Master Plan Study, that the findings and suggestions of the Community College Study will be given serious consideration where they may bear on the problems under investigation in the Master Plan Study. Certainly this section on the relationship of community colleges to other educational institutions in Pennsylvania, along with the recommendations contained in the final section, are among the most pertinent.

Relationship to other institutions of higher education in Pennsylvania

In order to examine the relationships between community colleges and other institutions, it is necessary to make certain assumptions regarding the nature of those institutions. We have not made an exhaustive study, such as the one undertaken by the Academy for Educational Development; rather, we have examined the primary roles of other institutions in order to anticipate some of the problems that might arise as a new type of collegiate institution, the community college, is introduced into the system.

Private institutions

Pennsylvania has depended heavily on its heritage of private institutions to offer a very substantial part of its higher education. It has, in an unusual manner, assisted those private institutions to meet the State's educational needs by a system of subsidies from public monies. Whether or not such subsidies should be continued, and if so, in what amounts or to what institutions, are not appropriate questions for this study. It is assumed that whatever action may be pursued with respect to the private institutions, they will continue to fulfill their present roles; they will probably expand somewhat in order to serve an increasing number of students, but not an increasing proportion of Pennsylvania's youth. The need for community colleges will not be diminished by the expansion of the private institutions. Neither will the establishment of community colleges have any effect on the private colleges, since the need for facilities will greatly exceed the combined resources of the present and expanded public and private institutions.

One relationship with the private colleges is of potential importance: the possibility of community college graduates seeking to transfer to private institutions for upper division work. It would be advantageous to private and community colleges alike to establish satisfactory relationships regarding the transfer of students. Certainly it would be of benefit to many community college students to have this avenue of further higher education open to them. This is an area in which the Department of Public Instruction might well assume the initiative at the appropriate time. The Master Plan will in all likelihood deal with the problem.

State colleges

The transition of Pennsylvania's state teachers colleges into colleges of arts and sciences which emphasize the preparation of teachers, is under way; its full accomplishment is pertinent in several respects to the development of community colleges in the State. Since these colleges are scattered throughout the State, they are able to provide geographically accessible undergraduate arts and sciences opportunities to a substantial and probably an increasing proportion of Pennsylvania's youth. Consequently, in assessing any area of the State in order to determine its potential need for a community college, the existence or non-existence of a state college in the area will be a matter of importance.

A few sparsely settled areas served by state colleges do present a problem. The state college offers relatively economical lower division arts and sciences opportunities to academically qualified students. A community college would also offer this opportunity, and, in harmony with the typical community college policies discussed in a previous section of this report, it would offer in addition general education, semi-professional preparation, and developmental programs to students who would not be eligible for admission as freshmen to the state college. But in a few areas of the State the total number of individual youths seeking college opportunities is not sufficient to justify two collegiate institutions, particularly where one of them serves only commuting students. The state college is established and will continue to function. Two possibilities warrant exploration: (1) a community college division administered by the state college and functioning in most respects as a community college; (2) a community college planned to serve a larger geographic area than the typical commuting area, with some provisions established for residential students (i.e., supervised private rooms, student cooperative houses, self-financing residences, etc.).

Off-campus centers operated by the state colleges constitute still another area that must be considered. Here, the State Board of Education will have to determine an over-all policy. Consequently, in a later section of this report the alternatives will be clearly defined for consideration by the State Board.

The area of greatest importance deals with the transfer of community college students into the four-year state colleges. It would be a normal expectation that a substantial proportion of students transfering from the two-year colleges will seek entry into the state colleges rather than into other institutions. This seems logical for several reasons: (1) the state colleges will be geographically near to many such students; (2) the cost will be lower than in most four-year institutions; (3) the arts and sciences offerings and the emphasis on teacher preparation will appeal to a considerable number of community college graduates; and (4) the entrance requirements will be in harmony with the abilities of many of the community college graduates. If these assumptions are correct, it is very important that state college and community college officials set up machinery for the mutual exploration of these relationships. This should immediately be done at the state level. The Board of Presidents of the State Colleges have indicated an interest and and desire to attack this problem as soon as possible. Within each of the state college areas where community colleges develop, the officials of all of the colleges concerned should work together. In sum, there should be state-wide guidelines and general agreements, as well as specific arrangements in each geographic area where the flow of students from college to college will likely be heavy.

The State Board of Education is the body responsible for clearly enunciating the policy that such relationships should be established, and the Department of Public Instruction should initiate the arrangements that would make such negotiations fruitful. It is hoped that the Master Plan will take cognizance of both the problem and the need for cooperative action regarding it.

No doubt additional problems will call for close working relationships between these two types of public institutions. Hopefully state college officials will take the lead in initiating cordial working relationships with the community colleges in their respective geographic areas, and community college officials will respond; in this way difficulties can be anticipated and avoided.

Pennsylvania State University

It is not the function of this study to examine the educational roles of Pennsylvania State University, but certain assumptions regarding them are necessary in order to understand the relationships between the University and the community colleges that are and will be developing. Pennsylvania State

University should assume increasingly specialized educational roles in Pennsylvania in the future. This development would appear advantageous both for the State and for the University. By concentrating the substantial public resources devoted to the University on tasks for which it is uniquely fitted, the Commonwealth will stand to benefit much more fully from its investment than if the University is allowed to expend resources on tasks which other institutions can perform adequately. For the University, it would appear advantageous to address itself primarily to those functions which are characteristic of the great state universities of our land. The following would appear to be the most important ones:

> The prosecution of research in the arts, the sciences, and the professions, which only a large graduate university with its specialized graduate faculty can perform;
>
> The preparation of leaders, scholars, scientists, and other professionals through its specialized programs of graduate and professional education;
>
> The provision of high quality education for a small proportion of undergraduate students, those unusually capable and interested in the type of instruction which only the university can offer; and,
>
> The sharing of its advanced knowledge through such activities as extension work, consultation, and organized conferences with those in the Commonwealth who can utilize such services and knowledge.

Recent developments seem to underline the need for a shift of emphasis in state universities from service to a huge undergraduate student body to the more specialized tasks of research and the preparation of leaders. The so-called explosion of knowledge is both cause and effect -- research contributes to the increasing tempo with which knowledge is discovered and organized, and the expanding knowledge encourages greater research efforts. It also makes imperative the education of an ever-larger proportion of people in specialized areas of knowledge. Moreover, the realization that a college education is almost essential in today's life continues to add to the proportion of youth clamoring for such opportunity.

These trends seem to mark the passing of the state university that seeks to serve most of the state's needs for higher education. A state-wide system of higher education, comprehensive enough to perform the breadth of functions demanded, appears to be much more reasonable -- in fact essential if a state is to progress. In such a system the state university (or universities) performs its limited roles while other institutions perform theirs. This means that a growing number of state colleges and community colleges take on the functions of educating an increasing proportion of students while the state university performs the functions outlined above. The proportion of students accommodated by private institutions also decreases as more and more students seek education beyond the high school.

Assuming that Pennsylvania State University will proceed in the direction indicated above, and in which it is already headed, what should be the relationship between the University and the community colleges?

First, and most important, it is well to note that in many of the other states which have developed community college systems, the state university has been an important contributor to the development of these colleges. This reflects both enlightened self-interest and a genuine concern for the good of the state. The self-interest comes from the realization that a university to be great must be relieved of the responsibility of educating the inordinate numbers demanding higher education. It must be free to set admissions requirements in harmony with its educational purposes and programs. To enable the university to do so, however, other public institutions must be developed to meet the great and increasing demand for higher education. These institutions will be different from the state university, for they will perform somewhat different functions, but they are just as essential to the welfare of the State. Hence both the state university's self-interest and its concern for the welfare of the State give substantial reasons for it to support the other elements in the state's system of higher education.

Besides such general understanding and advocacy, what else may the state university do to help in community college development? Two services are immediately perceived. One is the education of the teachers and the administrators who will be needed in such institutions. This would seem to be a logical service for a state university. Another is the development of satisfactory transfer arrangements for those graduates of community colleges who should be encouraged and guided into the state university. While these may be few in the early years, in time they will constitute a substantial number of potential leaders for Pennsylvania. It behooves the Commonwealth to make appropriate provisions for these students, because they represent a priceless commodity -- persons with outstanding ability who might have been denied higher education in the absence of the accessible, economical, comprehensive community college. Hopefully, the Master Plan for Pennsylvania will deal with this aspect of the transfer problem.

Off-campus extension centers

In respect to the relationship of the community colleges and all other higher institutions in Pennsylvania, it is difficult to see the immediate solution of an apparent conflict of interest. This is a problem of the relationship of the community colleges to all off-campus extension centers, of which there are a good many. Pennsylvania State University's off-campus centers, after a long period of indeterminate status, have recently been redesignated as Commonwealth Campuses and, policy-wise, ascribed an important part in the University's development. They are envisioned as approximately doubling in enrollment of full-time students between 1964 and 1970. They offer, in various combinations on different campuses, transfer arts and sciences courses for select students, and semi-professional career preparation for additional enrollees. Over the years, other Pennsylvania institutions of higher education have also extended their services through off-campus centers, and a wide variety of programs are in existence today.

To a limited extent these programs and functions overlap with those of the potential community colleges -- limited, that is, because the community college will offer arts and sciences opportunities to a wider range of students, general education programs for a still greater range, and occupational preparation in a broader range of technical and semi-professional fields than those found in the extension centers. With respect to adult activities, the same comparison seems to hold: the community college would normally serve essentially similar activities as the centers, but it would serve a wider range of adults because of its fundamental commitment to the community and, consequently, its responsibility to provide community services.

This problem is brought into sharp focus in Section III, which deals with specific community college areas, or regions. In those regions in which off-campus centers are located, three alternatives present themselves:

(1) The area appears to be well served by the present facilities for higher education, and these facilities appear to be sufficient for some time to come.

In situations such as these the continuance of the extension centers appears to be the reasonable policy and no community college would be needed, at least in the near future. The problem of cost to students needs to be carefully studied, however.

In instances where the range of college opportunities offered by the center is limited, or where a number of students do not qualify for the University's admission requirements, the problem is more stubborn. In time, the demands for broader opportunities may force a reappraisal of higher educational facilities in these areas.

(2) The area is only partially served by the present facilities, and the facts regarding potential enrollment might seem to justify both the off-campus center and a community college.

In this case, the off-campus center might offer the usual transfer curricula in arts and sciences for those who are qualified to undertake such work, interested in doing so, and able to afford it financially. It would in all probability continue with any semi-professional offerings already developed. Some centers might well devote significant efforts in such a situation to the development of specialized offerings, either at the post-bachelor's degree level for credit, or on a non-credit basis, thus making available extremely valuable services in geographic centers away from the parent institution's campus.

The community college in these areas will in the long run be responsible for developing programs to fulfill the full gamut of community college purposes -- i.e., general education, transfer programs, semi-professional career preparation, adult offerings, and others. But in the early years, specific institutions may very well tailor their efforts to fulfill the unmet need of the community served. Certainly the community college should not duplicate any semi-professional career programs offered by the off-campus center. However, it would from the start have to inaugurate a transfer program in the arts and sciences, for not to do so would leave a large number of students unserved and would deprive the community college of its central collegiate character.

The problem of planning the career programs and adult offerings best suited to each institution will call for some kind of coordinating body. An advisory committee of citizens might serve, or a joint program-planning committee of officials from each institution and of lay citizens might be tried. However constituted, in order to function, the joint coordinating body's planning and recommendations would have to be accepted by both institutions.

> (3) The area appears to be inadequately served and the facts regarding potential enrollments would seem to justify only one public collegiate institution, not two.

In this situation the community college, because of its broader purposes, its potentially more comprehensive program, and its lower cost to students, may well be judged the better institution for long-range community planning.

An area with this situation constitutes a knotty problem, but one which will have to be faced, and only the State Board of Education, as the policy body for Pennsylvania's system of public higher education, can solve it.

In the long run, Pennsylvania and its universities will benefit by the greater concentration of its and their resources on tasks more significantly those of universities. In due time, several institutions could find themselves improved by being relieved of some of their off-campus operations because of their small size, lack of facilities, and difficulties in staffing. For instance, of the fourteen Commonwealth Campuses currently operated by Pennsylvania State University, there are currently eleven with lower division enrollments less than the number of full-time students generally considered to be minimum for satisfactory operation of community colleges (500). Of some seventeen other off-campus centers, only three have enrollments of 500 or more and fourteen have 244 or less.

The central core of the problem, however, is not just size; it is the relationship of size to purpose, program, and cost. The institution that will serve the broader functions will in the long run grow more and also cost less, both to the student who attends and to the community and State that supports it.

Following the analysis of potential community colleges within the geographic regions of the Commonwealth, the specific suggestions regarding off-campus center -- community college relationships are presented in the final chapter for State Board consideration.

Relationship to vocational education

Earlier in this section economic and occupational trends were discussed as factors which would affect the development of community colleges in Pennsylvania. The point was made that the development of community colleges would have a very important impact upon the economic progress of the State itself. As was pointed out, the existence of appropriately trained manpower is one of the vital factors in a State's development, and highly educated manpower most importantly of all.

Trained manpower is described in various ways. In fact, the variety of designations is one of the confusing aspects of occupational life of this country. Because of the considerable amount of over-lapping between even the most carefully drawn categories of workers, it is warranted in this section of the Community College Study to develop as careful differentiation as possible to serve as guidelines in analyzing the role of the community college in preparing trained manpower for Pennsylvania.

Trained manpower comes from many sources: universities, colleges, technical institutes, vocational schools, apprenticeship programs, etc. A source not to be overlooked is experience gained in occupational life itself. But as the tempo of occupational change increases, the necessity of decreasing the time for worker preparation becomes increasingly imperative. Organized educational programs are the most common vehicle for decreasing the amount of time needed to learn new skills or knowledge -- consequently, to an increasing extent schools and colleges are serving as the main source of qualified personnel. The effectiveness of such programs are thus of central importance to the State's economic development.

In differentiating levels of occupational competency and effective programs for preparing people for occupations, it is in some ways easier to start with the most highly trained and then work down to those callings demanding less preparation. Our professional workers are in general the most clearly labeled, and programs of preparation for the professions the most clearly identified. Even within them, however, there are demarcations of interest -- e.g., "learned" professions, "new" professions, "near" professions, "would-be" professions. In American parlance in the twentieth century, however, the most meaningful differentiation has come to be that between "profession" and "semi-profession." These two terms have come to connote a recognizable division between two groups of workers. Before elaborating on those differences, however, another group, the "skilled" workers, need to be mentioned.

We tend to associate the term profession with college and university preparation, the term "skill" with the skilled trades hence either "trade unions" or "labor unions."

Over a long period of time the differentiation between "profession" and "skilled trade" has been clearly recognized. The term "semi-profession," however, is twentieth century. It has evolved along with the emergence of occupations recognizably as in-between the professions and the skilled trades. And even as with the professions and the skills in earlier years, experience in apprenticeships or in the work itself has been one way of gaining entry into jobs with greater responsibility than the typical "skilled" or "clerical" worker, but with less status than the recognized "professional," -- as witness such titles as construction foreman, shop foreman, leaderman, specialty buyer, office manager, etc. Gradually, however, preparatory programs for these types of positions began to appear, and it is interesting to note that early in the development of the junior colleges in this country, some of their proponents talked about preparation for the "middle occupations" as a logical concern for these new colleges.

In the attempt to shed light on the differences between professional, semi-profession, and skilled workers, we have developed a chart to spell out these differences. The chart is presented on pages 62 and 63.

From this chart three generalizations emerge regarding the semi-professions and skilled occupations that are important ones for our further analysis.

(1) Semi-professions call for the study of the organized disciplines at a level that clearly denotes a college rather than a secondary school, while the skilled trades do not.

As it becomes essential for a worker in a skilled occupation to know the scientific or scholarly knowledge ordinarily associated with college level instruction, this constitutes an indication that the calling is passing out of the "skilled" category into the "semi-professional" one.

(2) The amount of time needed to master the knowledge and skill needed by the practitioner becomes one of the most practical guidelines as to whether the calling is a skilled occupation or a semi-professional career.

(3) The amount of continuing study needed by the worker also looms as very important. College experience should in general prepare the person substantially better for continued individual study than does high school work.

Based on the chart and these generalizations, definitions of semi-professional careers and skilled occupations can be drawn as follows:

The semi-professional careers call for a mastery of knowledge and skills which ordinarily demand college instruction in the arts and/or sciences as well as in the field of technology, business, or art itself. Although usually practiced in conjunction with a professional worker, the semi-professional career commonly calls for the exercise of considerable judgment. Semi-professional careers exist in the fields of science, engineering, technology, business, industry, health, education, recreation, government, and others, and include, for example, such designations as technicians, technologists, laboratory aides, accountants, executive secretaries, office managers, artists, teacher aides, recreation aides, sub-administrators, contruction materials analysts, estimators, etc.

The skilled occupations are those calling for a high degree of manual skill coupled with a knowledge of practices and procedures of the occupation

CRITERIA OF THE PROFESSIONS APPLIED TO OTHER OCCUPATIONAL LEVELS

CRITERIA OF THE PROFESSIONS	APPLIED TO SEMI-PROFESSIONS	APPLIED TO SKILLED OCCUPATIONS
1. Dependent upon a body of knowledge derived from scientific and/or scholarly research (ordinarily the essence of higher education).	Knowledge exists to a lesser degree or extent than with the profession, but is clearly higher education.	Dependent primarily upon knowledge of practices, not from scientific and scholarly research (clearly vocational knowledge).
2. Based upon principles of professional action which can be applied to practical problems (the essence of professional education).	Principles *less extensive* but clearly the *same kind* as professional.	Principles not prevalent -- rules of thumb more usual.
3. Knowledge and principles are organized so as to be communicable to learner through education.	Knowledge and principles exist to be taught, but not as extensive a body as in profession.	Knowledge of practices can be so organized, but also can be learned from practice.
4. An extensive amount of time is required for learning the knowledge, principles and skills necessary to become a practitioner (increasingly demanding education beyond the bachelor's degree).	Time required for learning much less. The knowledge, principles and skills commonly demand less than bachelor's degree, usually two years of college.	Time for learning practices and skills somewhat less than for semi-professions.
5. While secondary to knowledge and principles, skills, both lingual and manual, have to be mastered.	Both lingual and manual skills necessary, but more emphasis on manual than for professional worker, more emphasis on lingual than for skilled worker.	*Primary* emphasis on manual skills.

6. The practice of the profession calls for a large degree of judgment based on combination of knowledge and professional principles.	Some judgement called for, but less than professional, and practitioner usually under the supervision of a professional.	Judgment usually of a practical, applied nature rather than theoretical.
7. The practitioner usually must belong to a self-regulating association devoted primarily to improving the profession.	Varies -- Associations not well organized as yet.	Usually takes the form of a union devoted primarily to welfare of its members.
8. The practitioner is bound by a code of ethics for the profession.	Codes being developed, but not prominent in many semi-professions.	Not evident.
9. Practitioner usually licensed by State.	Usually licensed.	Usually not licensed (some notable exceptions such as barbering, beauty culture, etc.).
10. The need for practitioner to keep abreast of new scientific and scholarly knowledge as well as professional advances requires organized refresher study by the individual over and beyond his ordinary performance of duties.	Some organized study necessary, but not as extensive as with professionals.	New practices usually picked up on the job.
11. Considerable degree of altruism, and obligation to apply professional knowledge for the betterment of society.	Altruism relatively much less clearly identified or stressed.	Altruism not evident.

which enables the worker to make swift and effective application of his skill in practical job situations. The knowledge of science or art called for tends to be rudimentary and practical rather than advanced or theoretical. Skilled workers are found in practically all industrial, commercial and governmental organizations or agencies, and are designated by such titles as journeyman, master tradesman, machinist, carpenter, typist, stenographer, clerk, etc.

It will be noted that the term "technical" has so far not been used. This has been deliberate, because this term, more than perhaps any other occupational one, has become very controversial and almost meaningless. However, with the term "semi-professional" now defined and differentiated, it would appear that "technical" occupations are clearly in the semi-professional class, not the "skilled." The "technical" worker or technician has to possess the type of scientific or engineering knowledge suggested for the semi-professional career rather than the skill and practical usage of the skilled worker. He is in the "middle," between the professional and the skilled worker. His minimal preparation requires collegiate-level study to enable him to work with the professional. In short, "technical" occupations seem to warrant consideration as semi-professional careers and "technical education" as one kind of "semi-professional career program." Henceforth in this report we will use the terms "semi-professional and technical careers," and "semi-professional and technical education," in order to cover what we have defined in the previous pages.

With this rather theoretical discussion of occupational terms in mind, we can now turn to what is hoped will be a pointed and clearly focused discussion of the problems and issues connected with the relationship of the potential community colleges to vocational education.

A number of overlappings and conflicts between the two pieces of legislation regarding community colleges and vocational education in Pennsylvania were called to the attention of the State Board in memoranda addressed to the Board by members of the Department of Public Instruction. These conflicts were discussed by Dr. Dauwalder in his preliminary report on vocational education, and the preliminary report of the Community College Study made reference to them. Following these, the State Board asked the Acting State Superintendent to convene a small group of the members of the Department who were concerned about these overlappings and conflicts in order to work out policy agreements for the guidance of Departmental personnel. The directors of the Vocational Study and the Community College Study were invited to sit in on these sessions, and did so. Although this task has not been completed, four points of agreement were developed as staff recommendations:

1. There is an immediate need to provide for all of the vocational-technical education needs of the Commonwealth. This should be the first priority. It may not be necessary to assign program priorities to any particular institution during the next few years. Ultimately, however, the development of vocational-technical programs at all levels and the establishment of institutions for these programs will require careful coordination, especially with the regard to the Area Vocational-Technical School and Community College.

2. The future development of education in Pennsylvania will require the establishment of comprehensive high schools and comprehensive community colleges. In some instances, however, it may be necessary to establish the Area Vocational-Technical School as an intermediate step in making the transition from the traditional academically oriented resident high school to the comprehensive high school. When the area Vocational-Technical school is used for this purpose it should become a service center for resident high schools.

3. Specialists in vocational-technical education at the state and local levels -- from the high school through the community college, to all institutions in which federal and state funds are used for vocational-technical programs -- should be involved in the development, coordination and direction of vocational-technical programs in institutions of higher education.

   Within the Department the need for vocational-technical education at the post-secondary level will require the Bureau of Vocational-Technical and Continuing Education to assume additional responsibilities for vocational-technical education in our institutions of higher education.

4. For long-range planning the Community College is the desirable institution for post-secondary vocational-technical education in most areas of Pennsylvania. An overriding principle, however, is that the method which serves the largest number of students most effectively and economically is the preferred method. For this reason, school districts are encouraged to expand their comprehensive vocational-technical education program, establish area vocational-technical schools, and communities are encouraged to establish comprehensive community colleges as rapidly as possible, provided the development and curriculum of these institutions are coordinated to avoid duplication and to fully provide for the vocational-technical needs of the school districts and communities concerned.

These policies will need further clarification as problems in specific counties are encountered, but they are a good beginning step in the necessary process of spelling out directions for future development. We will, therefore, address our major attention in this part of our report to an analysis of the policies that are needed in order to make long-term planning possible. However, before turning to them a brief discussion of short-term matters is necessary.

Occupational preparation is so crucial a matter that it may be necessary to allow different institutions to perform similar tasks. Hopefully, however, these tasks will be performed in different geographic areas, so that undesirable duplication of efforts and programs will be avoided. To this end it would seem advisable that where area vocational-technical schools are being launched, community colleges as they become established should not develop any skill programs that the vocational school is capable of operating. Conversely, any "technical" programs operated by these schools which would be better programs if translated into full-fledged associate degree programs within a community college, should be relinquished to a community college when one develops and is capable of operating a high quality program. Careful coordination of planning at the local level should be the primary ingredient. The Board may have to see that such a policy is adopted and that the Department of Public Instruction leadership is exerted in accordance with it.

A second immediately needed step is the working out by Departmental personnel in the Bureau of Community Colleges and the Bureau of Vocational, Technical and Continuing Education of provisions for Board consideration for inclusion of appropriate community college programs for reimbursement under the Pennsylvania State Vocational Plan.

For long-range development, there seem to be two fundamental issues that the Board must resolve. The first major policy issue is whether the State's educational system is to be in general a unified, comprehensive pattern, or whether at a certain level or levels separate, single-purpose schools or colleges are to be the mode. At the upper reaches of the university, the general trend of the past century has been clearly away from the separate institutions toward the inclusion of professional schools into the university structure. While notable exceptions can be found, by and large the majority of front-line schools of medicine, engineering, science and technology, education, nursing, and the like are embraced in our universities. At the undergraduate, four-year college level, we have developed fundamentally in the same direction. Throughout the country, for instance, we have in the last two decades seen the gradual conversion of teachers colleges into multi-purpose colleges with broad programs in the sciences and the arts. Practically all land-grant colleges have developed into multi-purpose colleges and universities.

At the secondary level the trend has been steadily toward comprehensive schools, and we have seen the gradual disappearance of a great many specialized high schools. And at the two-year collegiate level the national trend has been away from single-purpose technical institutes in the direction of multi-purpose colleges.

However, just at this period we seem to be witnessing a strong push for the area technical vocational school. This appears to be an attempt to strengthen programs of vocational preparation at the high school level and for the immediate post-high school years. This is a laudable and highly desirable purpose. To some extent it follows the pattern of events previously witnessed -- i.e., when colleges paid no attention to the preparation of badly needed teachers, "normal schools" were founded in an effort to fulfill this function.

The all-important question is whether a move almost diametrically opposed to well-established trends has much chance to succeed. Hopefully the area vocational technical school might bring vocational opportunities to students in sparsely settled areas where small high schools cannot singly provide such opportunity. In the long run, however, the move toward consolidation of school districts into larger units and the gradual evolution of comprehensive high schools large enough to provide balanced programs would seem to be more promising.

The relationship of this problem to career programs in the two-year community college is immediately apparent. First, if comprehensive high schools and comprehensive community colleges are the patterns to be developed, relationships between high schools and local community colleges would be close; for many students the local college would be the logical, economical mode of obtaining education beyond the high school, no matter what the ultimate academic or vocational objective of the student might be. If area vocational-technical schools are the pattern selected, the problem becomes one of coordination between separate institutions rather than vertical articulation of closely related institutions. In such a pattern, students unfortunately are faced with the necessity of leaving the predominant stream of education in order to achieve vocational goals. As Dr. Dauwalder so clearly shows in his report, it is unlikely that such occupational programs will attract substantial numbers of students.

The concurrent development of community colleges and the area vocational schools also complicatesthe problem of articulating programs for adults. If the full gamut of programs is offered in a single institution, the problem is much simpler. Again, cooperative planning among the various institutions in the same geographic area will be called for.

Third, the concept of "technical institute" as a part of the separate vocational school causes confusion. It is doubtful that the duplication of the same type of occupational program in the technical institute and the community college would be a long-range direction of great appeal. The justification for an occasional institute would seem to lie in a quite different direction: a very specific need for highly specialized workers for which a single-purpose institute might be promising. Fashion Institute of Technology which serves the interests of the huge clothing industry of

New York City immediately comes to mind. The present restriction of separate institutes to Philadelphia and Pittsburgh would seem to make good sense according to this line of reasoning.

For the long run, then, the State Board must decide whether the weight of its policy leadership should be in the direction of comprehensive secondary schools and comprehensive community colleges as the general pattern. In the meantime, it must safeguard against unnecessary duplication by stimulating cooperative planning within geographic areas and by scrutinizing quite carefully the proposed plans of both community colleges and area vocational-technical schools.

The second major policy issue has to do with the organization of the Department of Public Instruction with respect to vocational education. Community college leadership should be unified within the bureau recently inaugurated for that purpose; this means that the bureau should have leadership responsibility for occupational programs just as it has for arts and sciences, general education and the like. On the other hand, the vocational education bureau is also concerned with the nature of occupational programs developed in the community colleges where they come under the provisions of the State Plan for Vocational Education. The answer would seem to lie in the cooperative development of the provisions in the State Plan by members of the two bureaus. The members of the community college bureau could then primarily be responsibile for working with the institutions in the development of programs in harmony with the state provisions; the vocational bureau could be primarily responsible for the administration of the Plan. Both would have to be involved in planning and carrying out the Departmental evaluation of the quality of programs in the community colleges.

Although the above analysis may appear somewhat cumbersome and less clear cut than an assignment of total responsibility to one or the other of the bureaus involved, in reality there is no other way than the cooperative one. Vocational affairs can no more be outside institutional or departmental channels than can English or science or mathematics.

It becomes the role of the State Board of Education, assuming the adoption of such a policy as its guideline, to see that the policy is understood and implemented.

SECTION II

COMMUNITY COLLEGE POSSIBILITIES AND PRIORITIES BY REGIONS AND COUNTIES

A. INTRODUCTION

The focus of this section of the report is on the formation of community college districts and priorities, and on the criteria essential to their establishment. In order to determine any of these, it was necessary to obtain considerable information regarding the State, its regions and its counties. A brief account of the procedures that led to the development of the criteria and, ultimately, the districts and priorities follows.

Procedures and data

No other post-secondary institution is more closely and deliberately related to its community than the community college. Thus it was decided at the outset of this study that a county by county analysis would be the most effective approach. This procedure proved to be the most satisfactory one, as a good many of the reports and documents that were studied by members of the staff were organized on a county basis.

Demographic, economic, and educational data were gathered, analyzed, and interpreted separately for each of the State's 67 counties. Information was obtained from a wide variety of sources, both public and private, and from all levels of government.

Some of the more important data have been made available in the appendices to this report. So that the reader may refer to these readily as he examines the specific districts and priorities that comprise the bulk of Section II, an outline of the data in each of the appendices is given here. All appendices provide data for each of the 67 counties.

Appendix A: Shows the actual population, the projected population, and population change.

Appendix B: Deals with migration, density, and urban population, as well as the total labor force, and the number and percent unemployed.

Appendix C: Presents total personal income by county of sources and by county of residence, median family income, per capita income, and estimated assessed valuation for 1965.

Appendix D: Gives high school graduates, projected for 1966, 1970, and 1974; full-time freshmen and total full-time enrollment potentials for community colleges, projected for 1966, 1970, and 1974, and based on Formulas "A", "B" and "C".

Appendix E: Contains full-time, part-time, and total (combined) enrollment potentials for community colleges, projected for 1966, 1970, and 1974.

Appendix F: Gives the number and percent of 1964 high school graduates who entered colleges and universities and other post-secondary institutions.

Appendix G: Deals with projected enrollments for 1970 (Formula "B"), projected budget (combined operating and capital expenses), estimated market valuation and millage on market valuation, and estimated assessed valuation and tax on assessed valuation.

Appendix H: Shows potential full-time enrollment for 1970 (Formula "B"), local budget and tax rate, full-time equivalent of potential part-time enrollment and budget addition, and total budget and tax rate.

Attention is called to the Explanatory Notes which preface Appendices D, E, G and H. The reader may want to turn to these before proceeding to Part B of this section. The Notes preceding Appendix D describe in detail the methods employed in calculating the projected high school graduates. These Notes also provide an explanation of Formulas "A", and "B" and "C". The Explanatory Notes in Appendix E deal with part-time enrollment potentials and the manner in which these were estimated. The Notes at the beginning of Appendix G inform the reader of the methods used and the formula developed to calculate operating and capital costs. The introductory Notes to Appendix H provide a detailed explanation of the methods used to determine full-time equivalent enrollments and the potential additional operating cost.

Much of the material presented in the appendices and outlined here is amenable to statistical treatment. It is evident, however, that the projections and formulas are based on certain assumptions. Some of these assumptions relate to social and economic conditions, others to educational matters. But all are extremely important to this study. Since many of the assumptions pertaining to this study are contained in Section I, the reader may want to refer to that section again.

Because of the close relationship between a community college and the community which it serves and from which it receives much of its support, steps were taken to obtain further information about each of the counties and, where possible, about some of the local communities within them. Consequently, folders containing most of the basic data for each county were prepared and studied by members of the staff prior to visiting the counties personally. Most of the counties were visited, and interviews were conducted with county superintendents and city superintendents and members of their staffs, representatives of local planning groups, Chambers of Commerce, business, labor, and educational leaders, heads and staff members of other institutions and their branches, as well as others.

Although these visits varied somewhat according to the interviewer, the person or group interviewed, and the county visited, they provided some of the most useful information and insights. Since cooperative efforts within and/or between counties are frequently required in the establishment of community colleges, the visits enabled our staff members to learn more about the opinions and attitudes of the residents. Moreover, first-hand observations of the terrain, the roads, proposed sites and temporary quarters, all contributed to the final judgments regarding community college potentials.

When all of the information for each of the 67 counties had been translated into community college potentials, the counties were divided into twelve regions which served as the basis for the more refined analysis that finally led to the establishment of potential community college districts.

Criteria

"There is no one set of criteria which can be used satisfactorily by public or private 2-year colleges throughout the United States."* There appears to be substantial and increasing agreement on this point. Rigid national criteria do not provide for the flexibility essential to local planning; they fail to take into account the fact that there is no one single context for all two-year colleges.

But it is useful to establish a set of fairly broad criteria based on a knowledge and understanding of the conditions under which they are to be applied. This was of course the point of the preceding discussion. The criteria which follow have been developed in light of the conditions peculiar to Pennsylvania, but also with an eye to the experiences of other regions and states throughout the nation.

The priorities in Part C of this section (Section II) were assigned according to a three-fold assessment based on "need," "feasibility," and "community interest." While it is not always easy to maintain these distinctions in a discussion of criteria that are integrally related to one another, generally the first three criteria represent need, the next two feasibility, and the last community interest.

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*D. G. Morrison and S. V. Martorana, Criteria for the Establishment of 2-Year Colleges, U. S. Department of Health, Education, and Welfare, Office of Education, 1960, p.61.

Local needs

This is probably the most basic of all criteria. There are a number of measures that indicate need. Specifically, educational needs arise from changing economic, occupational, and social demands. The plans and aspirations of high school seniors are also measures of need. Moreover, they have important implications for program planning.

Enrollment potential

The minimum enrollment potential of 500 students established by the Pennsylvania State Board of Education seems reasonable if the college is to provide at least a transfer program and perhaps three to five semi-professional and technical programs. Attainment of this enrollment by the fifth year of operation would seem desirable. Where this figure is not attainable, a cooperative undertaking with one or more neighboring counties should be considered. A college with an enrollment potential of 1,500 or more students is able to achieve considerably greater diversity. In addition to four or five transfer programs, such an institution could offer seven or eight semi-professional and technical programs. Emphasis should be given to the development of adult education, an important function of the community college. Entrance requirements are of course related to the specific programs to which admission is sought. The so-called "open-door" policy is to the college; specific requirements may be set for the various programs.

Availability of other higher institutions in the area

The proximity of other higher institutions should not in itself preclude the establishment of a community college. Need, interest, and financial ability are perhaps basic considerations. Moreover, the admission requirements of other institutions, their transfer policies, appropriateness of programs, and cost to the student, need to be examined before a decision can be made. If a student is not admitted to a particular college, if he cannot afford the cost of attending, or if the program that he seeks is not offered, that institution fails to satisfy his need.

Accessibility

Travel time is generally a better guide to accessibility than distance. The two are of course related; an hour's drive on a divided highway under favorable conditions may cover twice or three times the distance covered in the same period of time on poor roads or in highly congested population centers under unfavorable conditions. While this may vary, generally one hour each way seems to be a reasonable maximum. The matter of public transportation facilities should also receive attention.

Financial support

The exact formula for determining operating and capital costs is given in Appendix G. The local sponsor is required by law to assume one-third of the operating cost and one-half of the capital expenditures. Evidence of financial ability would be indicated if the local sponsor could provide a quality education in the programs listed above with adequate physical facilities without an unreasonable increase in the local tax rate.

Community interest

Although it is extremely difficult to assess this exactly, there are some measures that indicate community interest. A community that has actually undertaken a study of local needs is obviously interested. The formation of a formal community college committee, even though it may not have had time to conduct a survey, also indicates community interest. Meetings, discussions, and conferences devoted entirely or in part to the community college is still another example of interest. Requests for information about community colleges addressed to such agencies as the Department of Public Instruction, the Association of Junior Colleges, the U. S. Office of Education is further evidence of interest.

The twelve geographic regions

These criteria are sufficiently comprehensive to assure adequate coverage of essential considerations. Their application in the establishment of community college districts is the burden of the next part of this report. The accompanying map shows the twelve regions, and the counties within each region, from which the community college districts were derived.

THE TWELVE GEOGRAPHIC REGIONS

(1) North West Region

Clarion
Crawford
Erie
Forest
Mercer
Venango
Warren

(2) North Central Region

Cameron
Elk
McKean
Potter

(3) Williamsport Region

Bradford
Clinton
Lycoming
Montour
Sullivan
Tioga
Union

(4) North East Region

Columbia
Lackawanna
Luzerne
Pike
Susquehanna
Wayne
Wyoming

(5) Western Region

Beaver
Butler
Lawrence

(6) West Central Region

Blair
Cambria
Centre
Clearfield
Huntingdon
Jefferson

(7) East Central Region

Juniata
Mifflin
Northumberland
Snyder

(8) Lehigh Valley Region

Berks
Carbon
Lehigh
Monroe
Northampton
Schuylkill

(9) South West Region

Allegheny
Armstrong
Fayette
Greene
Indiana
Washington
Westmoreland

(10) South Central Region

Bedford
Franklin
Fulton
Somerset

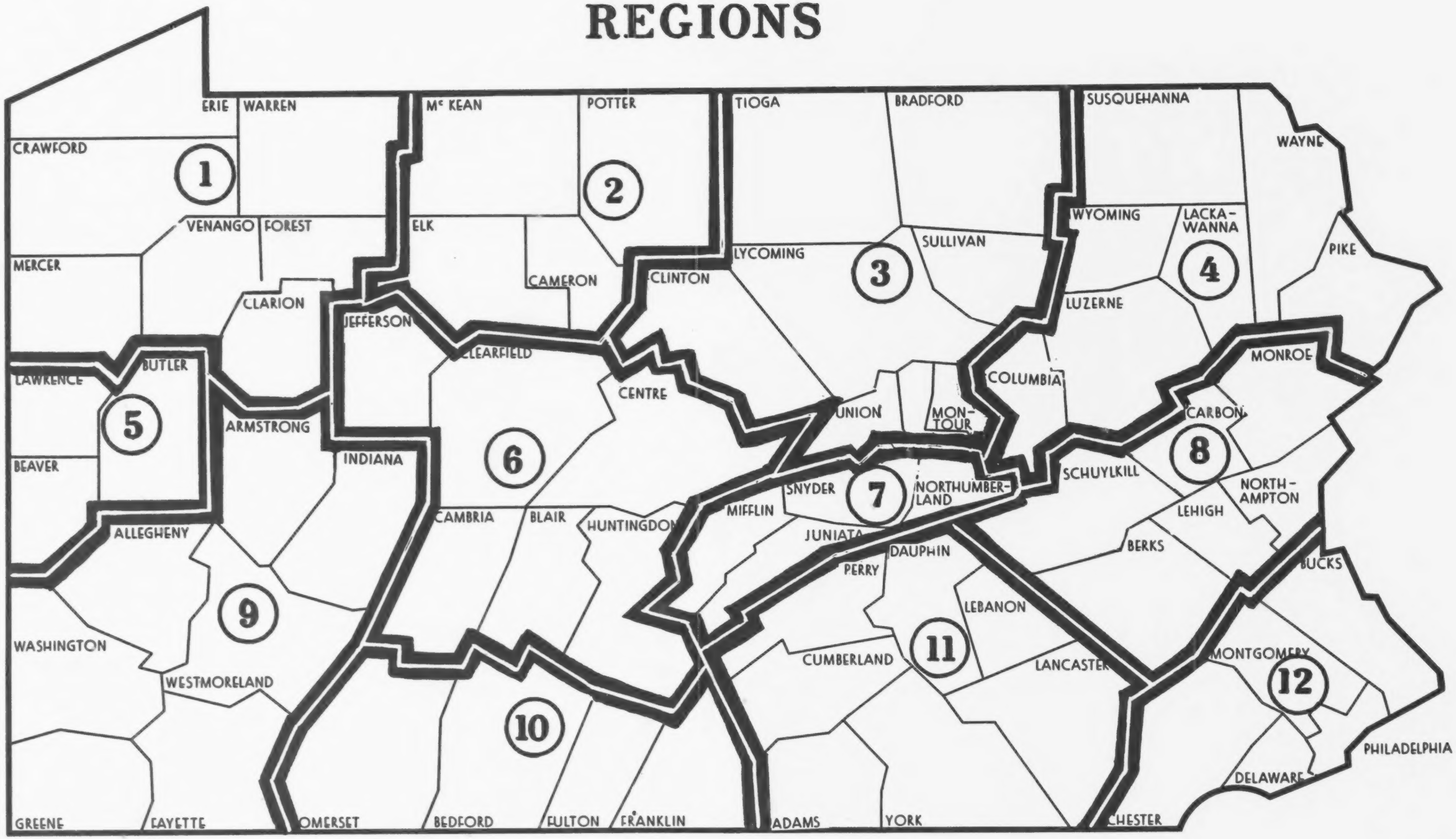
(11) Capitol Region

Adams
Cumberland
Dauphin
Lancaster
Lebanon
Perry
York

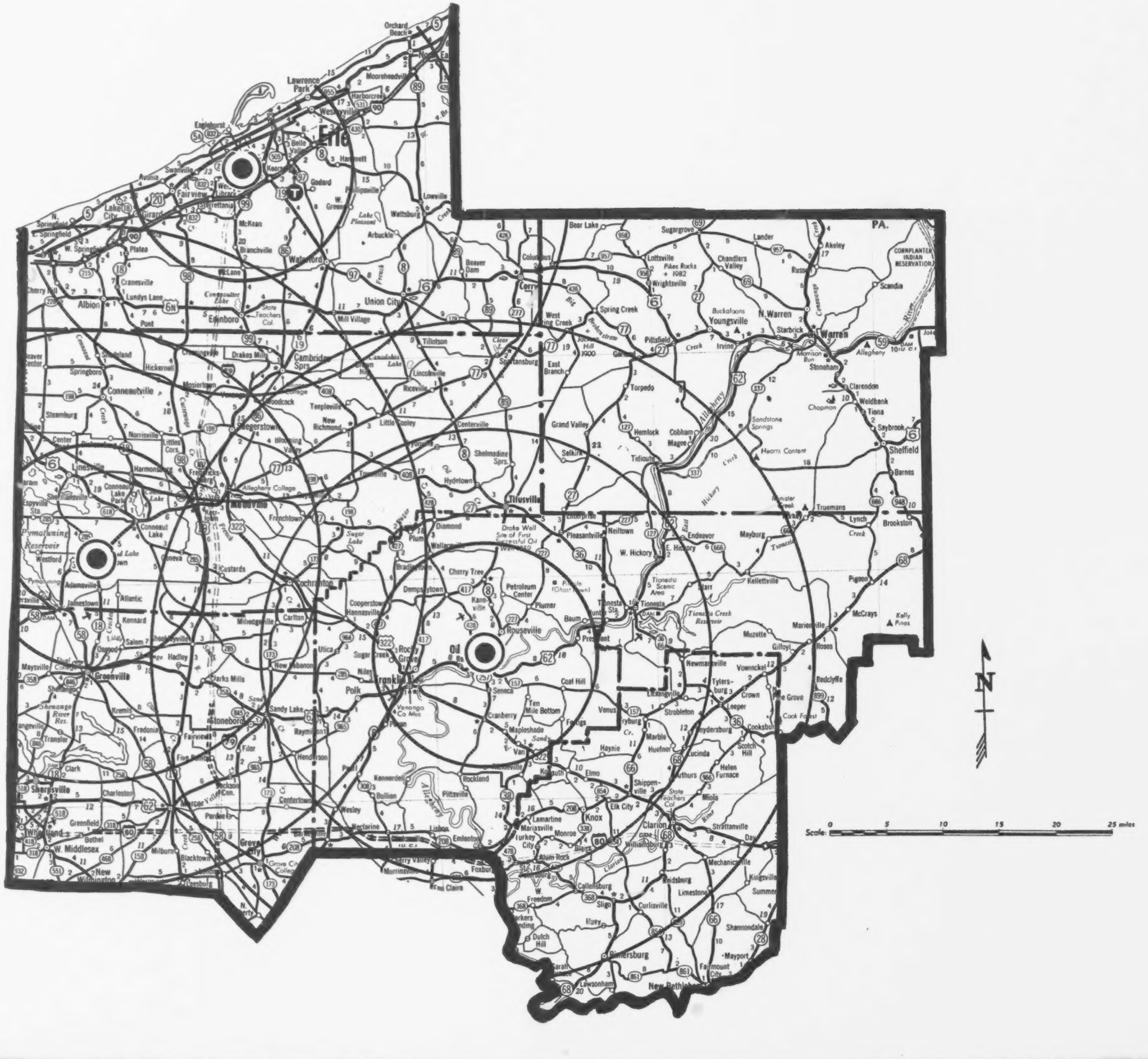
(12) South East Region

Bucks
Chester
Delaware
Montgomery
Philadelphia

REGIONS


ERIE
WARREN
CRAWFORD
1
VENANGO
FOREST
MERCER
CLARION
Mc KEAN
POTTER
2
ELK
CAMERON
CLINTON
TIOGA
BRADFORD
LYCOMING
SULLIVAN
3
SUSQUEHANNA
WAYNE
WYOMING
LACKA-WANNA
4
PIKE
LUZERNE
LAWRENCE
BUTLER
5
BEAVER
ARMSTRONG
JEFFERSON
CLEARFIELD
CENTRE
6
INDIANA
CAMBRIA
BLAIR
HUNTINGDON
UNION
MON-TOUR
COLUMBIA
MONROE
CARBON
8
SCHUYLKILL
NORTH-AMPTON
LEHIGH
BERKS
SNYDER
7
NORTHUMBER-LAND
MIFFLIN
JUNIATA
DAUPHIN
PERRY
LEBANON
11
CUMBERLAND
LANCASTER
BUCKS
MONTGOMERY
12
PHILADELPHIA
DELAWARE
CHESTER
ALLEGHENY
9
WASHINGTON
WESTMORELAND
10
GREENE
FAYETTE
SOMERSET
BEDFORD
FULTON
FRANKLIN
ADAMS
YORK

(1) NORTH WEST REGION


PA.
Erie
Lawrence Park
Wesleyville
Harborcreek
Orchard Beach
Moorheadville
Belle Valley
Kearsarge
Fairview
Girard
Lake City
Swanville
Avonia
Platea
Cranesville
Albion
McKean
Waterford
Union City
Mill Village
Edinboro
Cambridge Sprs.
Conneautville
Springboro
Linesville
Meadville
Saegertown
Allegheny College
Cochranton
Greenville
Jamestown
Adamsville
Pymatuning Reservoir
Sandy Lake
Stoneboro
Mercer
Grove City
Sharpsville
W. Middlesex
New Wilmington
Corry
Columbus
Bear Lake
Sugargrove
Lottsville
Youngsville
N. Warren
Warren
Starbrick
Irvine
Spring Creek
Pittsfield
Garland
Torpedo
Grand Valley
Spartansburg
East Branch
Centerville
Titusville
Drake Well Site of First Successful Oil Well 1859
Pleasantville
Tidioute
Hemlock
Cobham
Sheffield
Clarendon
Tiona
Saybrook
Barnes
Kellettville
Tionesta
Marienville
Pithole (Ghost Town)
Cherry Tree
Petroleum Center
Plumer
Rouseville
Oil City
Franklin
Polk
Utica
Cooperstown
Seneca
Cranberry
Venus
Knox
Clarion
Shippenville
Elk City
Emlenton
Foxburg
Parker
Callensburg
Sligo
Limestone
Rimersburg
New Bethlehem
Strattanville
Cook Forest
Cooksburg
Leeper
Scotch Hill
Helen Furnace
Mayport
Fairmount City
Lawsonham
Dutch Hill
Kennerdell
Rockland
Pittsville
Allegheny
CORNPLANTER INDIAN RESERVATION
Kelly Pines
N
Scale: 0 5 10 15 20 25 miles

~~B.~~ ANNALYSIS OF POTENTIAL COMMUNITY COLLEGE AREAS

North West Region

The Northwest Pennsylvania Redevelopment Conference for Economic Development, established in January of 1961, reflects the growing cooperation among the nine counties that participated in that Conference. For this Study, seven of those counties are grouped together as the North West Region: Erie, Crawford, Mercer, Venango, Clarion, Forest and Warren. These are shown on the accompanying map.

The North West Region has long been plagued with unemployment; according to the United States Department of Labor, Bureau of Employment Security, "Forest, Mercer, Warren, and Venango counties are classified by the Bureau as areas of substantial unemployment, while Clarion, Crawford, and Erie counties are classified as areas of substantial and persistent unemployment."* Since the time of that report, a number of counties and statistical areas have improved their economic status. In 1961, nearly 10% of the region's labor force was unemployed; in February of 1965 unemployment had dropped to 5.7% for Erie, 7.6% for Crawford, 5.1% for Venango-Forest, 4.2% for Warren, 8.5% for Clarion, and 3.3% for Mercer.

Geographically the region consists of two distinct areas: the Lake Erie, and the Allegheny plateau, the latter embracing the major portion of the region.

Although there is a variety of agricultural activities, the backbone of economic support for the region is manufacturing, particularly of durable goods. At an earlier time, petroleum dominated one subregion, but manufacturing, orginally based on steel and coal, now looms as the most important productive enterprise. The potential of tourism and recreation is only recently coming in for major attention.

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*Northwestern Pennsylvania Conference for Economic Development, Overall Economic Development Program, September 1961, p. 9.

Potential community college enrollment. The need for community college education varies greatly from county to county in the North West Region. Differences in the density of the population, the accessibility and character of the institutions of higher education already established, the college-going traditions and expectations of the young people and their parents, all are important. An overview of the region's potential can be presented most clearly by listing for each of the seven counties the minimum enrollments for 1970, taken from Formula "A" in Appendix D. Also listed are the enrollment potentials considered most reasonable if relatively favorable circumstances surround the establishment of the community colleges; in this instance the most appropriate choices among the enrollments from Formulas "A", "B" and "C" were used.

From these projections we see that only three counties have a chance of developing individually community colleges with enrollments over the minimum enrollment of 500 students set by State Board. One of these, Mercer, would be dependent upon the closing of the proposed Pennsylvania State University Commonwealth Campus or its conversion into a multi-purpose, comprehensive community institution. Consequently, it is apparent that community college development in this North West Region ought to be based on cooperative planning between and among the various counties. Several alternatives can be envisioned and are explored below.

County	Minimum	Reasonable expectancy
Clarion	175	252
Crawford	360	512
Erie	1,220	1,220
Forest	27	39
Mercer	567	970*
Venango	270	384**
Warren	189	189

*For Mercer, this enrollment would only be reasonable if the Shenango Valley Extension Center of Edinboro State College is closed and the proposed Pennsylvania State University Commonwealth Campus is not developed. Should either of these centers be continued, probably the minimum enrollment in Mercer County is all that would be expected within this period of time.

**Only if the Venango Center of Clarion State College is converted into a community college, or is closed; otherwise, probably the minimum enrollment is more reasonable.

Erie-Crawford-Warren

Erie County is the one northeast county clearly of sufficient size to develop a college on its own potential enrollment, and even Erie would benefit to some extent from joining with its neighbors to the south and east. Hence an Erie-Crawford-Warren Community College is worth studying as one alternative.

As will be seen on the accompanying map, these three counties are contiguous and form the extreme northwest corner of the State. As will be shown in the discussion of commuting distance and time, only the western portion of Warren would be adequately served, and it is possible that the southwest portion of Warren would be more conveniently served if an institution develops in Venango County. Nonetheless, if the people of the western part of this County desired, they should be thought of as potential participants in the community college for this extreme northwestern area.

None of these counties has so far inaugurated committee study and action, although individuals in each county have evidenced interest. In both Crawford and Erie counties, the development of plans for area vocational technical schools has occupied the attention of a considerable number of persons; the establishment of these schools should clear the way for earnest work on the possibility of a community college.

The area to be served by a cooperatively developed community college would be extensive, but good highways, particularly Highways 90 and 79, make fast commuting possible for a substantial portion of the population to be embraced. If the college were to be located on the southwest outskirts of the city of Erie, all of Crawford and a considerable portion of Warren would be well within an hour's drive of the campus. A more geographically central location would of course shorten the commuting time from the outlying areas, but the availability of the college to the larger population of Erie would be lessened.

The combined enrollment from the three counties would probably come to about 2,000 students within a period of perhaps five years. An institution of this size would cost the sponsor about $767,000 annually. A tax rate of

1.8 mills would be necessary to finance both capital and operating costs.* From the standpoint of accessibility and cost, it seems clear that the Erie-Crawford-Warren community college is a feasible undertaking.

An institution of this size would be able to serve the varied needs of the district very well indeed. A rich arts and sciences offering could be developed and would be needed, for while there are some seven institutions of higher education in the geographic area under analysis, only Edinboro State College and Gannon College draw high school graduates from the area in substantial numbers. With the increased admission requirements at Edinboro, more and more potential students will have no low-cost, comprehensive institution to attend.

The program of career courses could be a broad one, responsive to needs of business and industry in the region as well as to the desires of young people to prepare for the various semi-professional and technical positions. Industrial and construction technologies, chemical and electrical technologies, business careers in accounting, management, and specialized secretarial work would seem particularly worthy of investigation. Not to be overlooked would be the usual semi-professional workers needed in the health fields, such as nurses, x-ray technicians, dental assistants and hygienists, medical laboratory technicians, and still others, for in an area with the total population of this region the health fields are commonly in need of increasing numbers of adequately trained semi-professionals.

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*As noted in other sections of this report, the projected costs for a complete campus have been based on estimates of $4,000 per student for capital outlay and $850 per student for operating costs. The sponsor is responsible for one-half the capital costs and one-third of the operating costs.

Also prominent in the region are the recreational and educational needs. The ability to develop unusual offerings will be one of the advantages of a college with the potential enrollment of the Erie-Crawford-Warren district.

When the need, enrollment potential, and financial feasibility are considered, this area rates a high priority. The only factor which keeps it from the highest priority is the lack of local planning to date. A well developed plan should merit serious consideration on the part of the state authorities.

Mercer-Crawford

Another possibility for cooperative action would be the union of Crawford and Mercer counties, should Crawford not be joined with Erie. The potential enrollment would, at even the most modest estimate (Formula "A" for Mercer and "B" for Crawford), reach a thousand quite soon, which would clearly warrant the development of a college. Such a college might very well draw much more heavily right from the start, and could reach 1,500 if the extension center situation is cleared up in Mercer County.

Neither Crawford nor Mercer has at present a community college committee, but both have county superintendents interested in studying the need for community college education as soon as the plans for area vocational schools are completed. The character of both counties indicates an increasing interest and concern over adequate college facilities in the years ahead, constituting a solid foundation on which to build support for a community-oriented institution. Although there are six institutions of higher education in the geographic area, none draws heavily. Actually, Youngstown University in Ohio pulls by far the largest enrollment from the high schools of this region, and state colleges have enrolled a substantial portion of those going to college. Hence the need for additional opportunities will likely rise precipitously with the anticipated increase in college-going aspiration. It is this anticipated increase that makes the extension-center type of institution inadequate to cope with the needs of this region.

The program of a Mercer-Crawford Community College could be broad enough to accommodate a wide range of vocational careers of the semi-professional type, with stress on business, industrial, and scientific positions. Regional planning should be undertaken cooperatively by whatever community colleges are developed in the North West Region, in order to insure that differentiations among the various programs complement rather than duplicate offerings.

From the standpoint of financial feasibility, an institution of around 1,000 students could be adequately financed. The sponsor's cost for constructing a complete college plant and operating a full program comes to some $383,300 annually. On the estimated 1965 assessed valuations for the two counties, a millage in the neighborhood of 1.6 would raise such an amount.

From all of these considerations a high priority for such a college would seem justified.

If the Mercer-Crawford joint venture is not developed, the possibility of Mercer joining with Lawrence County should be explored.

Venango-Clarion-Forest

These three counties border each other and form a quite compact geographic area. None of the three could develop a college by itself because of lack of enrollment, but taken together under favorable circumstances a modest-sized college of something around seven hundred students could evolve. One of the circumstances necessary for such development would be the conversion of the Venango Center at Oil City, presently operated by Clarion State College, into a community college to serve this proposed Venango-Clarion-Forest district. In such a sparsely populated region only one two-year college can possibly be supported; while the advantages in the long-run lie heavily with the broader services that a community college would be capable of rendering, the people of the counties concerned will have to work this problem out with the sponsors of the Venango Center. Conferences with these sponsors by a member of our staff revealed a group deeply committed to the institution which they have developed, yet also concerned about the broader needs of the entire area. Similarly, officials of Clarion State College, and very particularly President Gemmel, indicated that their concern would be for the best solution for the entire area.

The determination of the future plans will lie heavily with the school officials of the area, particularly the county superintendents and their staffs. At the moment both Venango and Clarion counties are emersed in the problem of developing area vocational school districts. When these plans are matured, serious consideration of community college needs should be jointly undertaken.

If a community college is developed, dormitory facilities would enable it to serve an area somewhat greater than usual for a commuting college. Also, if the college developed one or two unusual programs peculiarly fitted to the region served, with dormitories these would be available to residents in other parts of the State. For instance, petroleum technology would in all likelihood be a career choice suited to this area; this might appeal to a few students from other regions. Similarly, forestry work is an occupation appropriate for this area; preparation for certain forestry positions might well attract students who would be interested in this unusual program. Chemical technology, x-ray technicians, drafting, and business careers loom as potential areas of work which should be studied.

From the financial standpoint, a joint Venango-Clarion-Forest community college could be supported by the three counties with approximately a three mill tax. This was estimated on the basis of an enrollment of 700.

If a community college on the cooperative basis suggested above proved unattainable, the possibility of Clarion State College undertaking a community college division should be explored, although the obstacles to the State College attempting such an operation are many. Acreage and building space are at a premium at the College. Even more important over the long-run, the proposed program expansions at Clarion State into the business, fine arts, and medical technology fields, plus work at the master's level, argue against the alternative of expanding the lower division program. Nonetheless, the need for a broad program available to the residents of the area is so great that this alternative should be investigated. Unemployment in Clarion has been classified as substantial and persistent, that in Venango as substantial. Additional education, while only one of the measures to be undertaken, is imperative if the area is to strive for self-improvement.

But the most effective collegiate undertaking would, it is believed, be the conversion of Venango Center into a tri-county community college.

To summarize the entire North West Region and its community college needs and priorities:

Three colleges would seem essential for serving the total needs of this region. One combination would be Erie (with or without a part of Warren), Mercer-Crawford, and Venango-Clarion-Forest. If Crawford joined with Erie to make a Erie-Crawford-Warren community college, then Mercer-Lawrence combination would have to be explored. All of these possibilities have been shown by the foregoing analyses to be needed and feasible under certain circumstances.

North Central Region

The North Central Region, composed of Elk, Cameron, McKean, and Potter counties is characterized by a stable but sparse population, lower than average socio-economic status, limited industrial development, higher than average unemployment, and a low college-going rate.

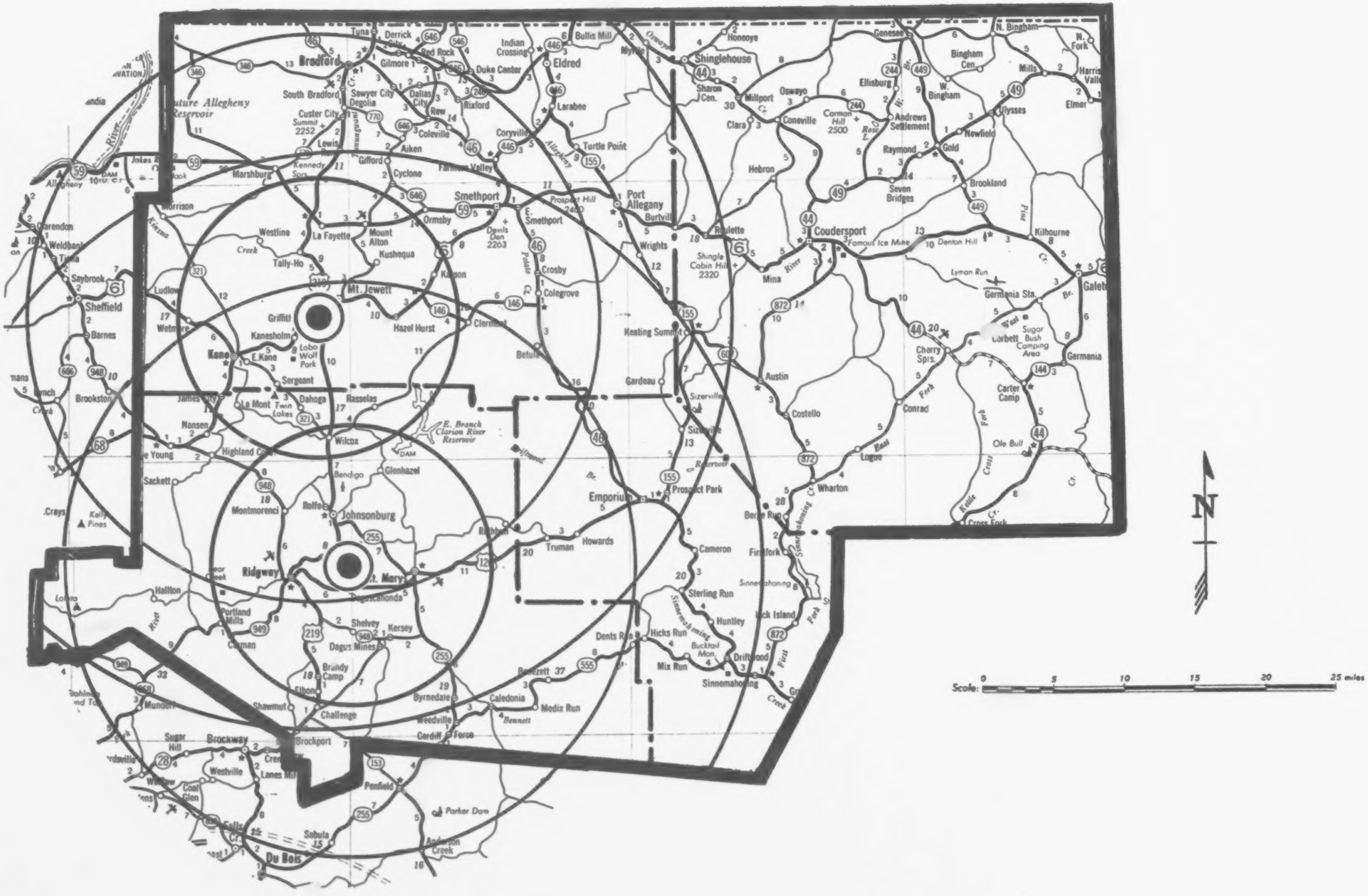
Enrollment and location

Minimum and potential enrollments, based on 1970 Formulas "A" and "B" respectively, are:

County	Formula "A"	Formula "B"
Cameron	35	50
Elk	172	244
McKean	256	365
Potter	70	100

The establishment of a community college in this region would require, at the least, the cooperation of all four counties. Although highways are not generally adequate for rapid commuting, the area badly needs a low-cost comprehensive institution. The only college facility presently available is the University of Pittsburgh Regional College at Bradford, which is quite costly for students in this area. Mt. Jewett in McKean County would be a central location for a four-county community college. At this point Highway 6 (Potter) intersects Highways 46 (Cameron) and 219 (Elk). The two major population centers of the region, Bradford and Ridgway-St. Marys, are equal distance from Mt. Jewett, about 20 miles or 35 minutes on Highway 219. As Mt. Jewett is only 20 miles from Emporium(Cameron) and 30 miles from Coudersport (Potter), students from these areas are also within possible commuting

[2] NORTH CENTRAL REGION



Bradford
Derrick City
Tuna
Gilmore
Red Rock
Duke Center
Indian Crossing
Eldred
Bullis Mill
Shinglehouse
Honeoye
Genesee
N. Bingham
Bingham Cen.
W. Bingham
Mills
Harrison Valley
Elmer
Ulysses
Newfield
Gold
Andrews Settlement
Ellisburg
Raymond
Seven Bridges
Brookland
Kilbourne
Galeton
Germania Sta.
Germania
Lyman Run
Sugar Bush Camping Area
Carter Camp
Ole Bull
Cross Fork
Cherry Sprs.
Conrad
Coudersport
Famous Ice Mine
Denton Hill
Coneville
Oswayo
Millport
Sharon Cen.
Clara
Hebron
Roulette
Mina
Shingle Cabin Hill 2320
Port Allegany
Burtville
Wrights
Keating Summit
Austin
Costello
Logue
Wharton
Gardeau
Sizerville
Prospect Park
Emporium
Howards
Truman
Cameron
Sinnemahoning
Sterling Run
Huntley
Driftwood
Hicks Run
Dents Run
Mix Run
Bucktail Mon.
Medix Run
Caledonia
Weedville
Byrnedale
Force
Cardiff
Bennett
Smethport
E. Smethport
Prospect Hill 2420
Turtle Point
Larabee
Coryville
Farmers Valley
Rixford
Coleville
Aiken
Gifford
Cyclone
Ormsby
Davis Den 2263
Crosby
Colegrove
Kasson
Hazel Hurst
Clermont
Betula
Mt. Jewett
Kushequa
Mount Alton
La Fayette
Westline
Tally-Ho
Custer City
Summit 2252
South Bradford
Sawyer City
Degolia
Dallas City
Lewis Run
Kennedy Sprs.
Marshburg
Future Allegheny Reservoir
Allegheny River
Kane
E. Kane
Kanesholm
Griffith
Lobo Wolf Park
Sergeant
Dahoga
Twin Lakes
La Mont
James City
Rasselas
Wilcox
E. Branch Clarion River Reservoir
Glenhazel
Bendigo
Johnsonburg
Rolfe
Montmorenci
Ridgway
St. Marys
Kersey
Shelvey
Dagus Mines
Brandy Camp
Elbon
Challenge
Shawmut
Portland Mills
Carman
Hallton
Sackett
Highland Corners
Nansen
Wetmore
Ludlow
Morrison
Clarendon
Weldbank
Tiona
Saybrook
Sheffield
Barnes
Brookston
Kellettville Pines
Crays
Brockway
Crenshaw
Lanes Mills
Westville
Sugar Hill
Coal Glen
Brockport
Penfield
Parker Dam
Sabula
Du Bois
Falls Creek
Anderson Creek
N
Scale: 0 5 10 15 20 25 miles

distance of the Mt. Jewett site.

The possibility of a college with dormitory facilities located close to the Ridgway-St. Marys population center also merits consideration. Dormitory facilities for 100 students should be sufficient to meet the requirements, over a five year period, for students who live beyond commuting distance, who have had little opportunity to continue their education, but who should have the opportunity to do so now.

A small community college enrolling between 600 and 750 students within five years may be feasible. However, the stability of the population and the comparatively long distances to the outlying areas would probably prevent the college from growing appreciably beyond the 750 figure.

Financial feasibility

Total annual operating and capital expenses to the sponsor for a college of 750 students would amount to some $291,000. Support could be obtained by a mill levy of 3.1 throughout the entire district. While high, this is not an unrealistic figure for counties in which facilities must be provided for a relatively small college population. (The cost of constructing, operating, and maintaining dormitory facilities has not been included in the above estimate.)

Program

A college of 750 students could offer a limited range of transfer programs in the liberal arts and sciences, with some limited orientation towards certain professional careers. General education could also constitute a substantial segment of the offering. Three to five technical curricula should be considered and chosen carefully after extensive study of regional occupational needs. The curriculum of the area vocational technical school presently being considered by Elk and Cameron counties needs to be examined in order to avoid duplication. At the outset, the college would need to assess the demand for programs in business, electronics, and in one of the para-medical fields, such as practical nursing or laboratory technology.

Priority. A small community college is financially possible. It would serve the youth of the North Central Region who do not now have access to an institution of higher education adapted to their aspirations and abilities. Through cooperation, the area vocational technical school for Elk and Cameron counties would complement a community college rather than hinder its establishment. Interest in a community college exists in each of the counties, but at present there is only limited activity. Consequently, a low priority would have to be assigned to the North Central Region until a local committee undertakes to study the needs of the area and to furnish impetus and direction.

Williamsport Region

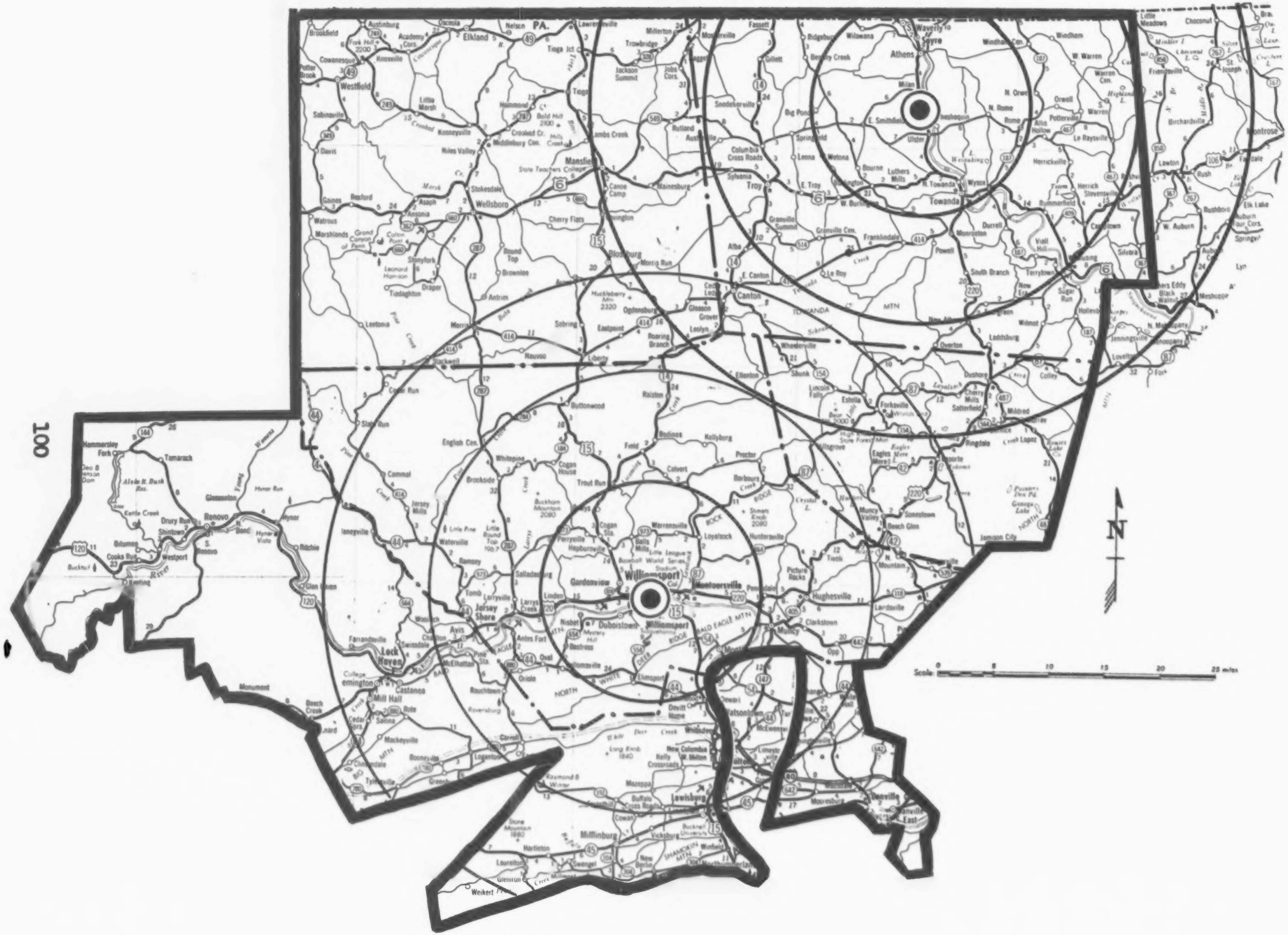
As shown on the accompanying map, the Williamsport Region includes Lycoming, Bradford, Tioga, Sullivan, Clinton, Union, and Montour counties. Large geographically, the region is sparsely populated -- about one-fourth the population density of the state average of 250 persons per square mile. Because of the considerable land mass included in this region, and the consequent time and travel distances involved, special attention must be given to the most feasible location for a community college. In addition to the established Williamsport Area Community College, two other arrangements warrant serious consideration.

Lycoming and cooperating counties

At present the Williamsport Area Community College is sponsored either in whole or in part by Lycoming, Tioga, Bradford, Sullivan, Union, Columbia, Snyder, Montour, and Northumberland counties. Major roads in these counties lead to Williamsport or its vicinity; hence a commuting distance of 30 miles would present no major obstacle. But the fact is that the present college district is spread over a much greater area. It is 50 miles to the major population centers in Bradford and Tioga, and the available traffic arteries would require a driving time in excess of 1½ hours. Sixty-five miles separate the Sayre-Athens population area in Bradford from the Williamsport Campus. Although the Sayre-Athens area is discussed separately, below, it is quite clear that the Williamsport Area Community College must make some arrangement for dormitory facilities.

Enrollment. Since it has already been approved -- and has in fact been in operation for some years as the Williamsport Technical Institute -- it may be well to examine the Williamsport Area Community College first. Considering

[3] WILLIAMSPORT REGION


PA.
Williamsport
Lock Haven
Jersey Shore
Montoursville
Hughesville
Muncy
Lewisburg
Milton
Mifflinburg
Danville
Renovo
Mansfield
Wellsboro
Blossburg
Canton
Troy
Towanda
Athens
Sayre
Waverly
Elkland
Westfield
Liberty
Ralston
Forksville
Eagles Mere
Laporte
Dushore
Montrose
Meshoppen
Wyalusing
Mill Hall
Duboistown
South Williamsport
Linden
Avis
Woolrich
Salladasburg
Trout Run
Little League Baseball World Series Stadium
Bald Eagle Mtn
Hammersley Fork
Tamarack
Westport
Kettle Creek
N
Scale 0 5 10 15 20 25 miles

the distances involved and the orientation of region's population, Formula "A" projections -- even with dormitory facilities -- seem most appropriate for the surrounding counties. The location of the college indicates Formula "C" for Lycoming. In the past, the Williamsport Technical Institute drew students from various parts of the State and the county. In light of this fact and in view of its present enrollment, it is reasonable to assume that an additional 500 students -- above those projected for the counties involved -- will be in attendance by 1970. According to these estimates, total projected enrollments for the Williamsport college come to nearly 2,614 students within five years.

County	Projected Enrollment
Bradford	186
Columbia	195
Lycoming	1,316
Montour	84
Northumberland	444
Snyder	94
Sullivan	34
Tioga	175
Union	86
Total	2,614

While this figure is substantial, a more compact community college that would be readily accessible to the southern half of Northumberland and to Columbia and Montour could draw proportionately more students from these counties (see the East Central Region for a more detailed discussion of this possibility). Such a move would not detract significantly from the established Williamsport venture. With the dormitory facilities urged at the outset of this discussion, the potential loss of enrollments from these areas to Williamsport would be offset by additional students from Snyder, Juniata, Clinton, and Mifflin counties and possibly from areas of Centre County.

County	Projected Enrollment
Bradford	274
Clinton	146
Juniata	75
Lycoming	1,316
Mifflin	175
Snyder	94
Sullivan	34
Tioga	175
Union	86
Total	2,375

Program. Since enrollments would not be affected substantially by this rearrangement, program planning could continue in the comprehensive direction now under consideration. Programs presently planned include those leading to transfer in the liberal arts and sciences, business, and engineering; those leading to careers in business and industry at the semi-professional level; and those designed to serve adult needs of the adjacent communities.

Financial feasibility. The estimated expenditures for the first year of operation at Williamsport for 1,300 students seem to be quite reasonable in the light of the existence of a small physical plant, equipped in many areas. According to the Williamsport plan, the combined operating and capital cost to the sponsors would be about $402,000. Based on the assessed valuation of the sponsors, this cost could be met by a tax of 2.0 mills. While this is a low figure, it must be remembered that an extensive new campus needs to be built in order to satisfy potential enrollment demands. In fact, it is strongly recommended that adequate facilities be provided at the earliest possible time. If the college is to attain an enrollment of 3,500 students by 1970, as indicated in its plan, a substantial amount of money for capital purposes will have to be secured.

Priority. The Williamsport venture is going well. All indications are that the college will open in September, 1965, and that some long-range planning has been done.

The possibility of a cooperative effort on the parts of Montour, Columbia, and Northumberland counties might in the long run prove successful educationally. The interest exists but the capability needs exploration and development. Losing these counties would mean generally little to the over-all success of the Williamsport Area Community College.

Bradford-Susquehanna-Tioga-Wyoming

Among the upper tier counties, Bradford is favorably situated. Its population has increased somewhat over the 1950-1960 period and promises to continue the trend during the next two decades. Nearly 70% of the population is rural, as revealed in the proportion of employment in farming -- nearly 17% against a state mean of 2.6%. Unemployment is low for the area.

Roads are generally good, so that a commuting distance of 30 to 35 miles would be reasonable. This would cover most of Wyoming and substantial portions of Tioga and Susquehanna. Bradford's preliminary report on community college potentials indicates considerable interest on the part of the county school board and administrators; it also reflects a willingness to cooperate with Susquehanna, Tioga and Wyoming. Plans for an area vocational technical school are expected to be completed in July, and while the specific site is still undetermined, consideration has been given to expanding in the same site to include a community college.

Enrollment. Bradford's low college-going rate of less than 24% of its high school graduates may be attributed in part to the lack of accessible post-secondary institutions. A reasonable projection (Formula "B") suggests an enrollment of about 400 students within five years. A conservative estimate of potential enrollments for Susquehanna would add another 100 students, a similarly conservative projection for Wyoming would increase enrollments by perhaps 50 students, and Tioga would add perhaps 100 students. Thus it would be reasonable to expect a total full-time enrollment of 600 to 650 students within a five-year period. A part-time enrollment of perhaps 250 to 300 students would be a conservative estimate.

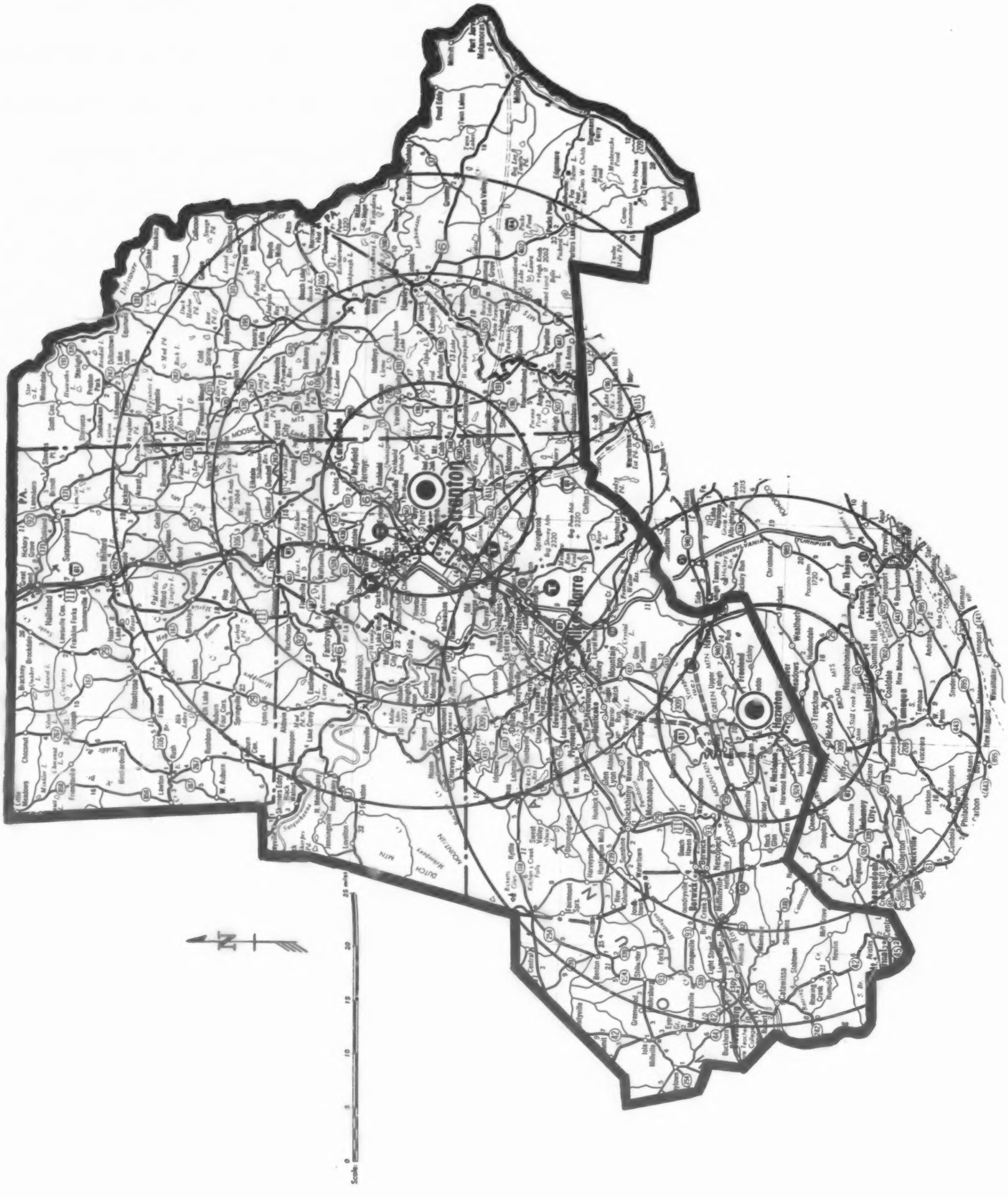
Financial feasibility. Using an enrollment figure of 600 full-time students, the college would cost the sponsors nearly $230,000 -- $170,000 operating and $60,000 capital expenses. Calculated on the basis of the combined assessed valuations of the four counties, $104,988,000, the tax rate would be around 2.2 mills.

Program. A college of 600 students could provide three or four good transfer programs in the arts and sciences and certain pre-professional programs -- much needed in the light of the low college-going rate -- and at least four or five semi-professional and technical programs. A recent Bradford survey of student interests and intentions showed that 215 twelfth graders, 230 eleventh graders, and 295 tenth graders wanted to attend a community college if it were accessible. According to the survey, boys indicated the following curricular preferences: liberal arts, engineering, drafting, accounting, business administration, and several laboratory and technical areas. Girls chose liberal arts, secretarial science, nursing, business administration, accounting, and the laboratory areas. These interests and aspirations are realistic in light of occupational demands.

Priority. Based on need, feasibility, and interest, the Bradford-Susquehanna-Tioga-Wyoming potential deserves serious consideration. This is so whether eventual plans call for a cooperative effort involving both the area vocational technical school and the community college, or just the community college.

Bradford is also exploring the possibility of enrolling Athens-Sayre students in New York State community colleges at Corning or Binghamton, which would require legislative arrangements for reimbursement. The possibility of a bi-state community college operated jointly by New York and Pennsylvania was also discussed. An appropriate New York official has indicated a willingness to discuss this possibility. All of these possibilities might well be explored further.

[4] NORTH EAST REGION



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North East Region

The North East Region of Pennsylvania is comprised of Lackawanna, Luzerne, Schuylkill, Wyoming, Susquehanna, Wayne, Pike and Columbia counties. These counties surround the major metropolitan complex of Scranton-Wilkes-Barre, to which all major arteries lead, except Route 80, which passes 15 miles south of Wilkes-Barre.

It is evident that the eight-county region comprises too large a geographic and population area to be considered en masse. It would help, therefore, to discuss the region by dividing it into possible community college districts.

Luzerne-Columbia-Schuylkill-Carbon

The counties surrounding Luzerne, viz., Columbia, Schuylkill and Carbon, are relatively similar. They are characterized by a stable or decreasing population, above average unemployment, and substantial manufacturing. Luzerne itself has a highly urban population, that continues to decline, has high unemployment, and considerable manufacturing activity.

The best location for a community college would be in the Hazleton area, midpoint for the four counties. The county commissioners of Luzerne have set aside 700 acres near Hazleton as a possible community college site. Not only is Hazleton the geographic midpoint but it is also the most accessible area for the surrounding counties. The new Interstate Highway 80 will run just above Hazleton and will consequently make that city readily accessible to Columbia, Carbon and parts of Monroe and Montour. Route 29 also connects major areas of Carbon and Columbia with the Hazleton area; Routes

309, 924, 81 via 122, 34 and 209 provide good access from Schuylkill; Routes 940, 309, 29 and 81 provide access for all of Luzerne. A 30 mile radius includes Bloomsburg and Berwick in Columbia, Shenandoah, Pottsville, and Schuylkill Haven in Schuylkill, Jim Thorpe and Lehighton in Carbon, the eastern half of Monroe, and all of Luzerne.

Enrollment. Using the Formula "B" enrollments for Luzerne and Formula "A" for the other three counties, the following enrollments may be anticipated within four or five years: Luzerne 1,897; Columbia 249; Schuyllkill 660; Carbon 170; with a total of 2,976. Formula "A" (rather than "B") is considered appropriate for the surrounding counties in view of their low college-going rates, the generally mountainous area, and the limited financial ability of potential students. Private college tuition charges are too high and admission requirements automatically eliminate another sizeable group -- even those interested in the very few associate programs at the Pennsylvania State University Commonwealth Campuses.

Financial feasibility. A combined enrollment of 2,976 full-time students would entail annual capital and operating costs to the sponsors of some $1,040,790. On the basis of the total assessed valuation of the four counties 2.1 mills would be necessary to support such an operation.

Program. A college with a full-time enrollment of nearly 3,000 students can offer a broad program. Besides the need to provide full transfer opportunities in the liberal arts and sciences, pre-professional training, and business administration, the college should offer a full-scale general education program, and as many technical programs as are considered necessary. Technical programs should offer secretarial, general business, engineering-related, and data processing curricula, as well as some to be determined by extensive survey. These might well include the para-medical areas, drafting and commercial design, Chemical technology, and sales-marketing technology.

Priority. Luzerne is actively considering a community college; it recognizes that joint planning and co-sponsorship means broader program offerings for the college and its students. At the same time, the Pennsylvania State University Commonwealth Campuses in Hazleton and Wilkes-Barre are pressing for expansion, and an area vocational technical school is under consideration for the Hazleton area. These do not on the whole affect the advisability of a community college, since both Pennsylvania State University Commonwealth Campuses and the area vocational technical school is in its final planning stages and building will shortly begin. Schuylkill County is also planning an area vocational technical school and has a limited enrollment in its Pennsylvania State University center. There is presently no activity in the community college area, neither here nor in Columbia.

Luzerne and Carbon are farthest along; Luzerne would have to be classified as high priority, Carbon as an area with needs that ought to be met in some manner through cooperative action. Columbia and Schuylkill are not far along, so that no priority is possible. Luzerne's needs provide the major impetus for joint planning. If the others do not participate strongly, Luzerne should proceed in any case, as its potential population warrants a college alone. The others should be allowed to participate as they become ready.

Lackawanna-Wyoming-Susquehanna-Wayne-Pike-Monroe

The counties surrounding Lackawanna and Scranton are similar in several respects. All have a comparatively high proportion of their total employment in farming, low college-going rates, and a fairly static population. As in the case of Luzerne, Lackawanna could proceed with its own college. But to do so would very greatly reduce any chance that the other counties, single or together, could develop adequate facilities for higher education.

To serve these counties, a site near the major population center at Scranton seems advisable. A location on the northern outskirts of Scranton might be the best location since it would be accessible from the Scranton metropolitan area and close to the convergence of the best north-south and east-west highways.

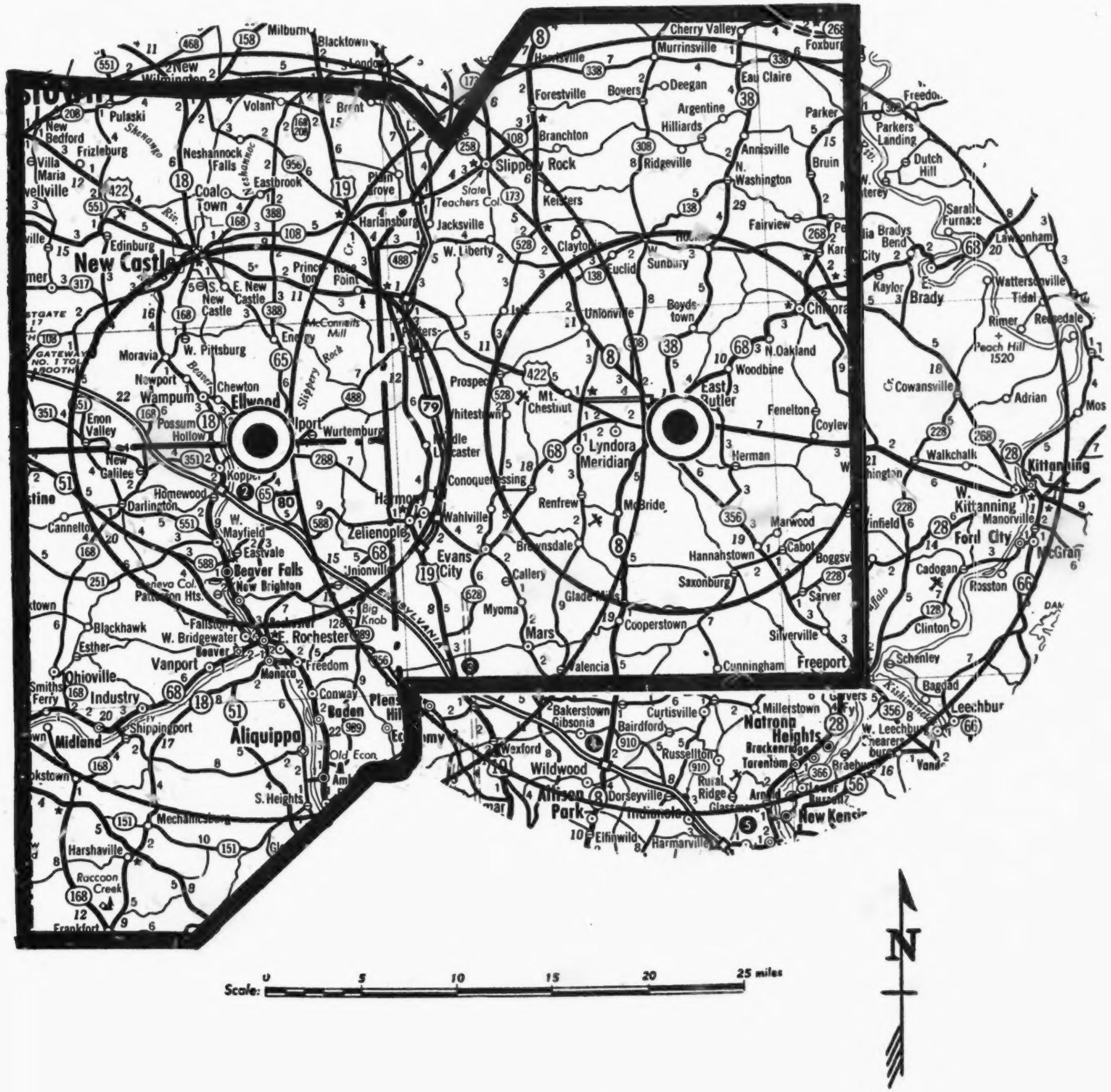
Enrollment. Due to the distances involved from the extremes of the outlying counties, Formula "A" provides the best estimate of 1970 enrollments for Wyoming (100), Susquehanna (12), Wayne (76), Pike (22) and Monroe (160). These enrollments, combined with the Formula "B" Lackawanna County enrollments of 1,360, produces an institution of good size, 1,824. In part the present low college-going rate of the area may be attributed to the tuition charges of the private colleges and the Pennsylvania State University Commonwealth Campus; in part it may be attributed to admission and transfer policies, lack of facilities, and limited offerings. For example, the number of students enrolled in the two associate degree programs offered by the Commonwealth Campus has increased slightly, from 92 in 1954 to 137 in 1964.

Financial feasibility. A college enrolling 1,824 students within about four or five years may expect an annual operating and capital budget of about $699,200. This cost could be met by a tax of 2.2 mills on the combined assessed valuation of the entire area.

Program. The college considered above is large enough to be comprehensive in its offerings and services. Transfer programs in the liberal arts and sciences, in business administration, nursing, engineering and other pre-professions -- and quite possibly in home economics -- would be feasible. Among the probable technical curricula indicated are programs for agricultural technicians, the business related technologies, para-medical fields, retailing, merchandising, and distributive technologies at management levels, chemical technicians, and one or two of the engineering-related technical areas. Nine to twelve different technical curricula are possible with an institution of the proposed size, so that any of these programs could be offered.

Priority. The need for a community college is undeniable, although there is strong support for the expanding Pennsylvania State University Commonwealth Campus, which now accounts for much of the county's interest in higher education. The area vocational technical school also takes a good deal of public interest. Monroe, too small by itself, is interested; Susquehanna has doubled taxes in the last decade and is having some difficulty with its area vocational technical plans, as are Wyoming, Pike and Wayne. The potential for a community college at this time would have to be rated as low in terms of feasibility, although the need is probably as high as in any area of the State. State community college leadership should see if there might not be latent interest among community groups that has not been tapped to date.

[5] WESTERN REGION


Cherry Valley
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Foxburg
Eau Claire
Harrisville
Forestville
Bowers
Deegan
Argentine
Hilliards
Parker
Parkers Landing
Branchton
Slippery Rock
Ridgeville
Annisville
N. Washington
Bruin
Keisters
State Teachers Col.
Fairview
Clayton
Euclid
Sunbury
Jacksville
W. Liberty
Harlansburg
Plain Grove
Brent
Volant
Milburn
Blacktown
New Wilmington
Pulaski
New Bedford
Frizleburg
Villa Maria
Neshannock Falls
Coal Town
Eastbrook
Edinburg
New Castle
S. New Castle
E. New Castle
Prince
Rose Point
McConnells Mill
Slippery Rock
Moravia
W. Pittsburg
Newport
Chewton
Wampum
Ellwood
Possum Hollow
Enon Valley
New Galilee
Koppel
Homewood
Darlington
Wurtemburg
Ellport
W. Mayfield
Eastvale
Beaver Falls
New Brighton
Geneva Col.
Patterson Hts.
Zelienople
Harmony
Evans City
Conoquenessing
Whitestown
Prospect
Mt. Chestnut
Unionville
Boydstown
N. Oakland
Woodbine
East Butler
Lyndora
Meridian
Fenelton
Coylesville
Herman
Renfrew
McBride
Marwood
Cabot
Brownsdale
Callery
Myoma
Mars
Valencia
Glade Mills
Cooperstown
Hannahstown
Saxonburg
Sarver
Silverville
Cunningham
Freeport
Chicora
Karns City
Kaylor
Brady
Bradys Bend
Sarah Furnace
Dutch Hill
Lawsonham
Wattersonville
Rimer
Peach Hill 1520
Cowansville
Adrian
Walkchalk
Kittanning
W. Kittanning
Manorville
Ford City
Cadogan
Rosston
Clinton
Schenley
Leechburg
W. Leechburg
Natrona Heights
Millerstown
Brackenridge
Tarentum
Curtisville
Bakerstown
Gibsonia
Bairdford
Russellton
Rural Ridge
Wexford
Wildwood
Allison Park
Dorseyville
Elfinwild
Harmarville
New Kensington
Blackhawk
Esther
Fallston
W. Bridgewater
Beaver
Rochester
E. Rochester
Monaca
Freedom
Vanport
Conway
Baden
Ohioville
Smiths Ferry
Industry
Shippingport
Midland
Aliquippa
Old Econ.
Ambridge
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Western Region

Lawrence, Beaver and Butler counties comprise the Western Region. The region has a manufacturing-based economy, with some farming and mining in Butler County, that can be described as relatively prosperous with unemployment at reasonable levels. Beaver and Butler counties derive income from the Pittsburgh area while Lawrence County has ties with the Youngstown area and with Beaver County. Movement and relationships north and south between Beaver and Lawrence County characterize the area more than Lawrence-Butler or Beaver-Butler relationships.

Butler County applied for and has received approval for a community college, and Beaver County's application has been recommended for approval by the State Council for Higher Education. Both Beaver and Lawrence counties have substantial population bases for considering the establishment of community colleges; however, since the possibility of cooperation between Beaver and Lawrence County is very promising, the potentials of both separate ventures and a joint undertaking have been reviewed.

Beaver County

Beaver is a substantial county. The population base is large and growing, the manufacturing base is strong, and the transportation net is adequate. Interest in a community college for the county developed early and is particularly strong among school administrators and labor unions.

Enrollment. Colleges and universities attracted 37.0% of the 1964 Beaver County high school graduates, while other post-secondary education attracted 16.5%, for a total of 53.5%. This total is slightly above the

State average of about 50%. Estimated community college enrollments in the fifth year of operation would be a minimum of 1,000 full-time students; a reasonable expectancy would be closer to 1,500 if the proposed Pennsylvania State University Commonwealth Campus should be converted into the proposed community college. It would appear, therefore, that a community college would be justified in either case.

Financial feasibility. Using the enrollment estimate of 1,000 students, we have calculated that an institution would cost about $385,000 per year to build a plant with complete educational facilities, equip it, and operate the college. A county tax rate of approximately 1.3 mills would finance both capital and operating costs.

Program potential. With an enrollment approaching 1,000 students a community college can offer a reasonably comprehensive program. In addition to transfer programs, semi-professional programs in business areas should be developed. Technical offerings to serve the primary and fabricated metal product industries, and the chemical product industry seem to provide a rich opportunity for program development. Health and community service semi-professional programs are needed as well.

Lawrence County

Lawrence County is relatively prosperous and stable, with a small increasing population forecast through 1980. Situated between the Pittsburgh and Youngstown area, the County has a good transportation net. Manufacturing, particularly primary and fabricated metal industries, provide the economic base, and unemployment is at a reasonable level compared with the state mean.

County school administrators and board members are interested in a community college for Lawrence County.

Enrollment. A relatively high percent of county high school graduates go on to some form of post-secondary education. In 1964, colleges and universities attracted 40.3% of the graduates while other post-secondary institutions attracted 15.7% for a total of 56.0%. The approximately 40% of high school graduates entering colleges or universities is well above the state average.

Estimates of potential community college enrollments in the fifth year of operation are a minimum of 530 and a reasonable expectancy of 750. Although the existing rate of post-secondary attendance is high, it seems that the 750 figure might be attained, for there are no public or low-cost comprehensive colleges in the county. High school graduates scatter to a wide array of institutions, and the attraction of a local college will likely be substantial as soon as it is established.

Financial feasibility. To build, equip and operate an institution for 750 students would cost the sponsor about $287,500 per year. A county tax rate of 2.5 mills would be necessary to provide for operation costs and capital outlay for a complete, fully equipped campus.

Program potential. A college of 750 students is somewhat limited in the breadth of program offerings it can attempt. Initially, a basic transfer program plus five to seven semi-professional programs would be possible. Career programs in business plus selected community-related specializations could be offered, depending on results of a survey of the area. As with

Beaver County, a technical program related to primary and fabricated metal products appears worthy of investigation.

Current status. We understand that a feasibility study, to be completed by the fall of 1965, is being undertaken by the county superintendent's office. Our assessment at this time suggests that while Lawrence County could initiate a modest-sized community college, the possibility of a joint venture with one of its neighboring counties is much to be preferred. We therefore turn to our analysis of the Beaver-Lawrence community college potential.

Beaver-Lawrence

These counties are fairly compact and to a degree are industrially and economically related. Transportation is quite good and improving. These factors would suggest the possibility and advantages of cooperation.

Potential enrollment. As noted in the analysis above, both counties have a relatively high proportion of high school graduates going on to some form of post-secondary institution.

County	Percent of 1964 High School Graduates:		
	Entering college or university	Entering other post-secondary institutions	Total entering post-secondary institutions
Beaver	37.0%	16.5%	53.5%
Lawrence	40.3%	15.7%	56.0%

Beaver County at present has only a private four-year college; a Pennsylvania State University Commonwealth Campus has been approved but with the proviso that it would be converted into a community college if and when such action was deemed advisable. The educational facilities of Pittsburgh are within a reasonable distance, particularly for residents of the southern portion of Beaver County. Lawrence County has a private four-year college within the County and Youngstown University just across the Ohio State line. A state college is located in Butler County.

Estimates of minimum and potential community college enrollments by county are:

County	Full-time enrollment estimates Minimum	 Reasonable expectation
Beaver	1,020	1,453
Lawrence	531	746
Total	1,551	2,199

In view of the relatively high current rate of attendance by high school graduates in some form of post-secondary education, it seems wise to use the minimum figures in estimating initial enrollments for a college to serve both counties. One of the reasons for considering a cooperative effort is supported by these figures. According to our criteria, either county could support a college, although a college in Lawrence County would be somewhat small; but a cooperative effort would result in a college with enhanced opportunities for offering a comprehensive program.

A combined enrollment estimated at 1,550 students must be considered a reasonable but conservative one. It is quite conceivable that an initial campus should be planned for no less than 2,000 full-time students, or in any even a campus should be planned permitting ready expansion to accomodate

2,000 or more students within a relatively short period of time.

Somewhere near the common border would seem appropriate as a possible location for a campus serving both counties. Ellwood City, for instance, is centrally located so that all of Beaver and Lawrence counties would be within a radius of about 25 miles, and the well developed highways makes this a reasonable distance to commute. Beaver Falls could serve as a location but this puts the northern part of Lawrence County beyond a 25 mile radius.

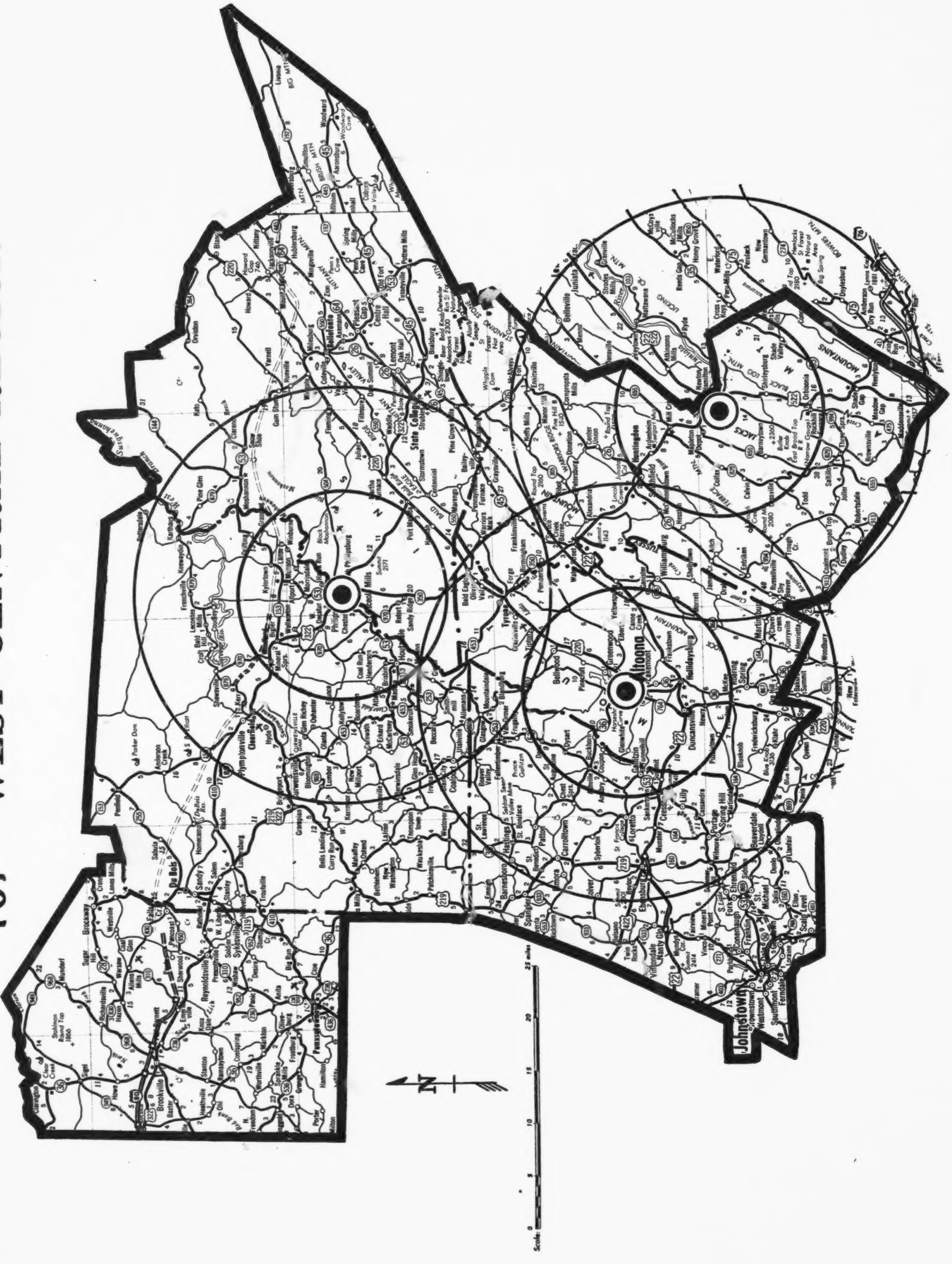
Financial feasibility. Using an enrollment estimate of 1,550, we calculate the cost to the sponsor to acquire and develop a site, to plan and equip a plant, and to operate the institution, as about $594,000 per year. A tax rate of 1.4 mills would finance both capital and operating costs. Using an enrollment estimate of 2,000, the cost would be about $767,000 per year, or a tax rate of about 1.9 mills. These are top estimates of expenditures and do not allow for some possible savings. If both counties established a college, it follows that both would have to provide certain commonly required facilities, services, and programs. A single campus offers the possibility of some savings through avoiding duplication of accomodations, library facilities, administrative staff, and specialized services. The likelihood is that the tax could be substantially under 1.4 mills.

Program potential. The major advantage in establishing a college as a cooperative, joint-county venture would be the broader scope of program offerings permitted by the increased size. A much greater range of semi-professional programs can be developed, for a college with 1,500 students can have almost twice as many different career programs as can one with

750 students. This area is highly industralized and the opportunity to develop unusual programs directly related to the manufacturing industry's needs is a challenging one.

Priorities. A proposal from Beaver County has recently been analyzed by the State Council and is presently before the State Board. Our analysis would show that this county could justify a community college on its own, even if a commonwealth campus is developed. However, the advantages shown for a joint venture between Lawrence and Beaver County are substantial; the possibility of such an undertaking would seem worthy of serious study. Even though the Beaver County proposal is approved immediately--and it would seem to rate high priority based on need, enrollment potential, program, and ability to support a community college--the State Board might very well suggest that the officials of these two counties explore the possibility of cooperation and report the results of such exploration within a reasonable time. In addition, a special committee of the State Council might well be appointed to work with the local officials of Beaver County and Pennsylvania State University regarding the status and plans of the Commonwealth Campus.

[6] WEST CENTRAL REGION


Johnstown
Altoona
State College
Huntingdon
Clearfield
Philipsburg
Osceola Mills
Du Bois
Brookville
Punxsutawney
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Hollidaysburg
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West Central Region

The West Central Region herein considered consists of six counties; Jefferson, Clearfield, Centre, Cambria, Blair and Huntingdon. The region is large; while it has some common characteristics it seems more appropriate to start with an analysis on a county basis, and then to consider the potential cooperative ventures.

Jefferson County

Marked by a declining population trend this county has a substantial, persistent unemployment problem. The percent of 1964 high school graduates going on to colleges and universities was 30.1%, to other post-secondary institutions 14.2%, for a total of 44.3%. This is some 6% below the state average. The county has a small state college extension center at Punxsutawney. The Pennsylvania State University Commonwealth Campus at DuBois (Clearfield County) and Clarion State College are within ready commuting distance of a large proportion of Jefferson County residents. Community college fifth-year enrollment estimates range from 179 students using Formula "A" to 256 students using Formula "B". Based on these estimates it would seem that the county cannot support a community college by itself.

Clearfield County

This county also has a declining population trend and a persistent and substantial unemployment problem. The two population centers, Clearfield and DuBois, are separated by a mountain and over the years have tended to develop relationships in opposite directions -- Clearfield looking east to Centre County and DuBois west to Jefferson County. The percent of Clearfield

County 1964 high school graduates that attended some form of post-secondary education was substantially below the state average; approximately 21.4% went to college and universities and 13.6% to other post-secondary institutions, for a total of 35.0%. Estimated fifth-year community college enrollment would be 377 under Formula "A" and 537 under Formula "B". Due to the essentially split focus of the county (Clearfield east and DuBois west), its current interest in establishing an area vocational technical school, and its relatively depressed economy, the possibility and priority for establishing a community college in the county is low. However, the very low rate of high school graduates attending post-secondary institutions indicates a substantial need for increased low-cost educational opportunity in the county.

Centre County

An unusually high proportion of Centre's increasing population is employed in providing services. This situation is marked by relatively low per capita income, low unemployment, and a fairly stable economy. The percent of 1964 high school graduates attending colleges and universities was 34.7%, other post-secondary institutions 11.4%, for a total of 46.1%. The college and university figure exceeds the state mean by about 1% while the figure for other post-secondary institutions is below the state mean by about 4%. Estimated fifth-year community college enrollments would be 289 under Formula "A" and 411 under Formula "B". The low estimated potential enrollment and a lack of interest in the community college idea, indicate that establishment of a community college supported by Centre County alone is neither feasible nor likely to be undertaken.

Huntingdon County

Low income, a slight decline in population, and persistent unemployment mark the county. A low percent (25.5%) of 1964 high school graduates went to college and universities while a fairly high percent (19.9%) attended other post-secondary institutions. The total of 45.4% is about 4% below the state mean. Community college estimated enrollments are 197 under Formula "A" and 280 under Formula "B". Based on the enrollment estimates, the economic situation, and current high interest in establishing an area vocational technical school, the priority for the county to establish a community college is low.

Blair County

Like Jefferson, Clearfield, and Huntingdon, Blair is expected to show some population decline and it too has had persistent unemployment. The percent of 1964 high school graduates going on to some form of post-secondary education is low. Approximately 21.3% attended colleges and universities (against a state mean of about 33%) and 15.7% attended other post-secondary institutions (against a state mean of 16%). The total percent of 37.0% is low compared to the state mean of 49.1%. Potential fifth-year community college enrollments are 628 under Formula "A" and 892 under Formula "B", which indicates that Blair County could support a minimum-sized community college by itself. The need for additional opportunity for higher education is apparent, based on the percentages of 1964 high school graduates attending post-secondary institutions. However, the Pennsylvania State University Commonwealth Campus in Altoona is an expanding, successful and community-minded operation. In view of this fact, the overriding interest in developing an area vocational technical school, and practically no local interest in a community college -- high priority for the establishment of a community college cannot be justified. However, it must be recognized that Blair County will continue to have unmet needs for higher education and that the enrollment projections indicate that the county may ultimately be able to support both the Commonwealth Campus and a community college, particularly if one or two neighboring counties were to cooperate in establishing a community college in Altoona or Hollidaysburg.

Cambria County

A substantial but declining population, low income and a relatively high and persistent unemployment problem describe Cambria. The percent of 1964 high school graduates attending all types of post-secondary educational institutions is 36.7%, low compared to the state figure of about 49.0%. The percent attending colleges and universities is significantly low, 22.6% (against the state mean of over 33%). Two private colleges and a University of Pittsburgh Regional Campus operate in the county. Fifth-year community college enrollment estimates are 957 under Formula "A" and 1,362 under Formula "B". When community interest, currently turned toward the development of area vocational technical school facilities, is displayed, the development of a community college in Cambria would rate a high priority. It is analyzed below as one of the potential colleges.

Cooperative ventures

Jefferson, Clearfield, Centre and Huntingdon counties cannot support individual community colleges by themselves. While Clearfield and Centre might form a joint community college, it would seem that Jefferson and Huntingdon will have to plan for their college-bound students to attend elsewhere. A state chargeback system will facilitate their doing so more easily than at present. This means that a large area of the State which could benefit from additional low-cost higher educational facilities, continues to have unmet needs. Blair County needs and has the potential enrollment base to support a college but the priority for action is low. Cambria needs and should consider a community college as a high priority item in its plans for the very near future.

To provide for part of the needs of the area, a cooperative endeavor between Clearfield and Centre counties will be considered, as will a college for Cambria County. The Cambria County situation will be analyzed both as a separate entity and as a possible cooperative effort along with Somerset and Bedford counties (see South Central Region).

Clearfield and Centre Counties

Possibility of a cooperative effort between Clearfield and Centre counties should be investigated. Establishing a community college at Phillipsburg provides a location reasonably accessible (within 30 miles or approximately one hour) to Clearfield City, to the majority of Clearfield County (including DuBois with the development of Highway 80), and to State College, Bellefonte, and most of the population of Centre County.

Potential fifth-year enrollments of a combined operation:

County	Formula "A"	Formula "B"
Clearfield	377	537
Centre	289	411
	666	948

Using the most conservative estimate a potential enrollment of about 650 students is a decided possibility. If the Tyrone area of northern Blair

County were included, some additional enrollments would be available.

For an enrollment of 666 students the estimated cost to the sponsor to build, equip, and operate a college would be $255,000 per year. A tax rate of about 2.4 mills would be necessary to finance both capital and operating costs.

Initially a basic transfer program plus from four to seven semi-professional programs would be possible. Semi-professional programs in business and selected community-related specializations could be offered, depending on results of a survey of the combined area.

To our knowledge this proposal has not been discussed by either county. While the need for and feasibility of such a cooperative effort seems apparent, priority is low due to inertia and opposition.

Cambria County

While the geographic center of the county is Ebensburg, the center of population is in the Johnstown area, and establishing a college in this area would seem most appropriate.

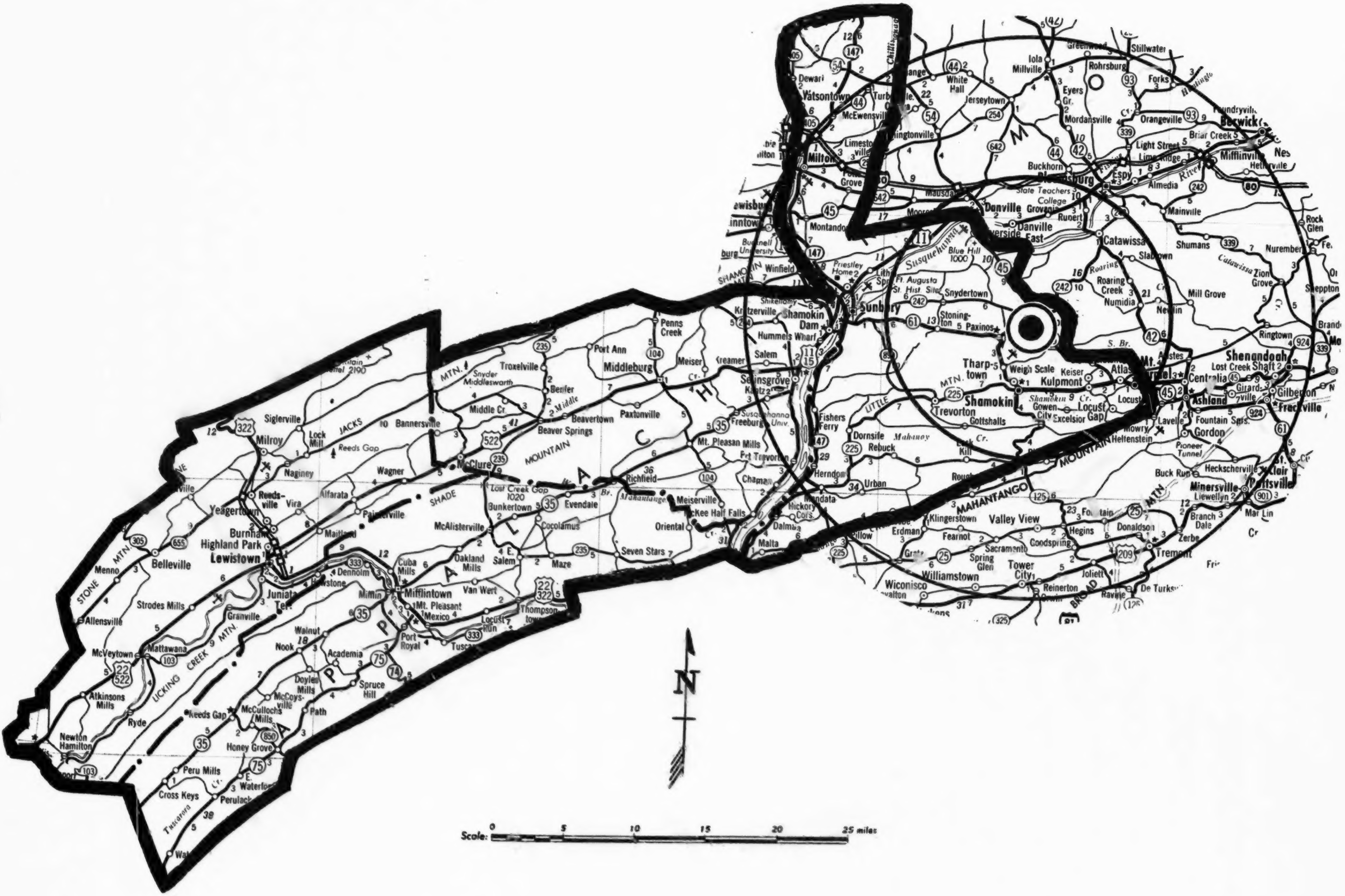
Although under Formula "B" the potential fifth-year community college enrollment estimate is 1,362, the use of the conservative Formula "A" estimate of about 950 students is perhaps more reasonable at this time. It is, however, apparent that a reasonably comprehensive community college can be established in the county. A program for part-time students would add to its comprehensiveness.

Using an enrollment estimate of 950, the institution would cost the sponsor about $364,000 annually for operating expenses and capital outlay for a complete campus. A county tax rate of about 2.5 mills would finance both capital and operating costs.

A community college of 950 students can offer a strong transfer program plus eight to twelve semi-professional and technical programs. Depending on the demands of the county, opportunities to develop an unusual program or two would exist.

The area vocational technical school development is already a matter of great interest in the county but community college interest is developing. In view of need and potential, a relatively high priority is considered justified for Cambria. The possibility of cooperation with Somerset and Bedford should also be explored. As analyzed in the material covering the South Central Region, neither Somerset nor Bedford counties can support individual colleges, and a combination of the two counties does not seem to permit the development of a viable single institution. Furthermore, the transportation pattern limits the establishment of a joint venture located between the cities of Bedford and Somerset. Bedford and Somerset counties are urged to approach Cambria County in order to investigate the possibility of their participation in the development of a community college for the Johnstown area. The distances and time involved in commuting from Bedford and Somerset to Johnstown are substantial but probably not unreasonable. The enrollment in the Johnstown facility may not be great, but the opportunity for higher education for the youth of Bedford and Somerset is an important reality to be borne in mind. A well conceived cooperative proposal would rate a high priority.

[7] EAST CENTRAL REGION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APPALACHIAN
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Siglerville
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Menno
Allensville
Strodes Mills
McVeytown
Mattawana
Atkinsons Mills
Newton Hamilton
Granville
Juniata Terr.
Denholm
Mifflin
Mifflintown
Mt. Pleasant
Mexico
Port Royal
Academia
Spruce Hill
Honey Grove
Peru Mills
Cross Keys
Perulack
Reeds Gap
McAlisterville
Richfield
Middleburg
Beavertown
Beaver Springs
McClure
Troxelville
Selinsgrove
Sunbury
Shamokin Dam
Northumberland
Milton
Watsontown
Lewisburg
Danville
Bloomsburg
Catawissa
Berwick
Shamokin
Kulpmont
Mt. Carmel
Centralia
Ashland
Shenandoah
Frackville
Gordon
Minersville
Pottsville
Tremont
Valley View
Williamstown
Tower City
Herndon
Millersburg
Trevorton
Tharptown
Snydertown
Paxinos
Riverside
Mifflinville
Orangeville
Rohrsburg
Jerseytown
Turbotville
McEwensville
SHADE MOUNTAIN
JACKS MTN.
STONE MTN.
LICKING CREEK MTN.
MAHANTANGO MOUNTAIN
BROAD MTN.
Susquehanna
Bucknell University
Susquehanna Univ.
State Teachers College
Blue Hill 1000
Priestley Home

East Central Region

The four counties of the East Central Region are characterized by long distances, a relatively poor road network, and different geographic orientations. Mifflin and Juniata counties are in some ways oriented toward the northwest, or Centre County, but essentially toward each other. Snyder is a small county equidistant from Harrisburg and Williamsport. Northumberland, because of its shape, is partially oriented toward Williamsport, partially toward Harrisburg, and partially toward the east, or toward Schuylkill and Columbia counties and the Hazleton area. A glance at the accompanying map may be helpful.

Enrollment

Potential full-time enrollments under the two formulas are as follows:

County	Formula "A"	Formula "B"
Juniata	75	107
Mifflin	175	249
Northumberland	444	632
Snyder	94	134

Even if the four counties were to cooperate in a community college effort, the most reasonable estimate for these counties (based on Formula "A" for 1970) would comprise only 788 students after five years of operation. Moreover, the matter is complicated further by the fact that several of the northern areas in Snyder and Northumberland are co-sponsors of the Williamsport venture. The primary interest of these counties in the development of area vocational technical schools, presents still another complication.

Northumberland, the source of the largest number of students, could cooperate with Columbia and Montour in a small starting venture of about 800 students (using Formula "A") if it were not already divided by Williamsport sponsorship. Montour and Columbia have also been invited to join the Williamsport complex and their decisions are not known at this time. Further, both Columbia and Montour could easily travel east to the proposed college at Hazleton (see North East Region). If cooperative efforts were launched by Columbia, Montour, and Northumberland, projections might reasonably be changed to Formula "B"; good accessibility, high potential demands (generally low post-secondary attendance rates), and the probability of considerable local pride, all suggest this change.

Under these circumstances, it is not unreasonable to expect a student population of 1,122 to 1,328 within a five-year period. An institution located near Elysburg in eastern Northumberland would be within an easy 20 mile commuting distance of Bloomsburg and Berwick in Columbia, Danville in Montour, Sunbury and Shamokin in Northumberland, and such areas as Shamokin Dam and Selinsgrove in Snyder, and Minersville, Pottsville, and Shenandoah in Schuylkill. With these additions from Snyder and Schuylkill counties, the potential population may well reach 1,500 within a few years. (Without a community college here, all of Schuylkill and Columbia could go to Hazleton -- not an unreasonable arrangement; large areas of northern Northumberland could also go to Hazleton via Highways 122 and 8).

Financial feasibility

The Columbia-Montour-Northumberland proposal would entail annual capital and operating expenses of $297,000 based on Formula "A" enrollments. This would require a tax rate of 2.15 based on the 1965 assessed valuation of the three counties. A Formula "B" college of 1,122 students would cost $430,000 annually and would entail a tax rate of 3.1. Although relatively high, this is feasible.

Program

A community college with approximately 1,000 students can offer a fairly broad range of programs, including several transfer areas (business, liberal arts, pre-engineering), general education, community service courses, and offerings in five to eight technical areas. Offerings in these areas might well include agricultural technology, at least one of the para-medical fields, business and secretarial science, and one of the engineering technologies. Retail sales and drafting might also be investigated.

Priority

Western Northumberland, all of southern Snyder, and both Juniata and Mifflin have no real possibility of forming a community college district. Their populations are too small and too scattered. Program possibilities would be extremely limited, and with the area vocational technical schools occupying major attention, there seems little hope of community college developments in the near future. Hence this venture would have no immediate priority. But it can reasonably be recommended that these counties plan with the Williamsport college for a chargeback arrangement and encourage Williamsport to explore the possibility of dormitory facilities.

An arrangement can be made, however, which would involve the eastern portion of Northumberland. Columbia, Montour, and Northumberland have cooperated in various endeavors and there is definite interest in higher education. A district composed of these three counties presents a real possibility for a medium-sized institution. Such a proposal would merit priority.

Lehigh Valley Region

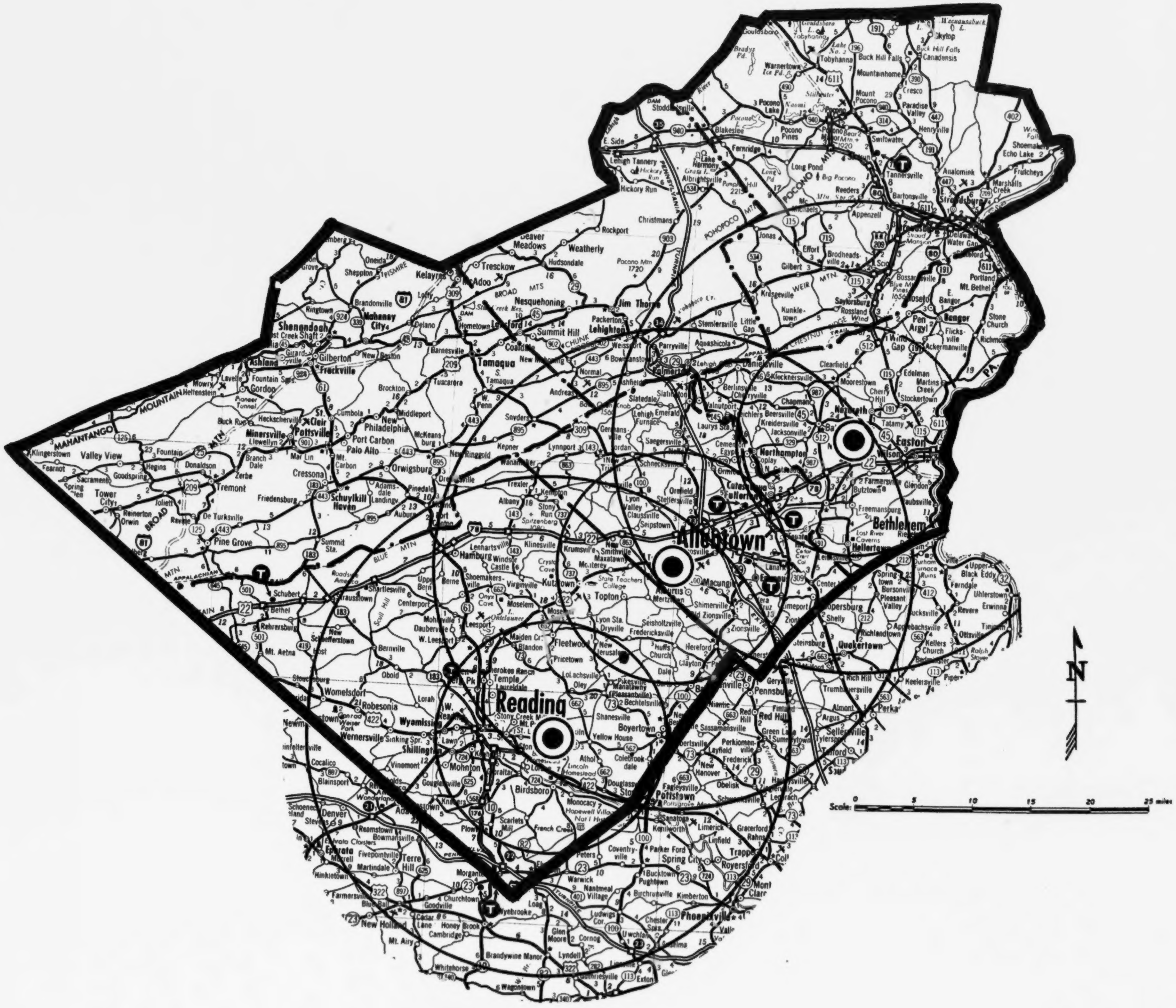
Six counties compose the geographic area that has been designated in this study as the Lehigh Valley Region: Lehigh, Northampton, Berks, Schuylkill, Carbon and Monroe. While some of these are not as intimately related to the entire region as others, they comprise a fairly compact area with a considerable degree of integrity.

Berks County is one of those less centrally located. Its financial resources appear adequate to support a community college of its own. Schuylkill ought to be considered along with Berks, and this county would be well advised to consult with Berks regarding the possibility of joint planning. Part of Schuylkill may be better served by commuting to the potential community college at Hazleton; even though this might split the county so far as community college allegiance is concerned, it may prove to be the best alternative. The people of Schuylkill should devote serious consideration to working out the best procedure for their youth.

Carbon and Monroe represent somewhat similar problems as Schuylkill; related to Lehigh and Northampton counties on the one hand, and Luzerne and Lackawanna counties on the other. Neither Carbon nor Monroe can support a community college by itself, and thus should be included as potential contributors to colleges that are formed within commuting distance of their residents.

The major question regarding the Lehigh Valley is whether Lehigh and Northampton counties should plan separate colleges or whether they should attempt a joint, cooperative institution. Each plan has its merits and its shortcomings; both are feasible. By filing its application, Lehigh

[8] LEHIGH VALLEY REGION


Allentown
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Easton
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Jim Thorpe
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Tamaqua
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Shenandoah
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Schuylkill Haven
Hamburg
Kutztown
Nazareth
Northampton
Quakertown
Boyertown
Phoenixville
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County threw this question into sharp focus. Our analysis of the advantages and disadvantages of each is based not only on the collection and interpretation of unusually abundant materials regarding this enterprising section of the State, the information from the questionnaires submitted to all county school superintendents' offices, and the results of personal visitations by one member of our staff--but in addition, upon the testimony presented in the two hearings conducted by the designated members of the State Council of Higher Education to which we were invited. We will present first our analysis of each of the two counties as potential sponsors of a community college, and then a review of the potentials of a joint venture. Following that we will analyze the advantages of each alternative, and finally sum up our assessment and our suggestion for solving the problem.

Lehigh County

A fairly populous county with a higher than average density of population, Lehigh is growing and will become steadily larger in the years to come. With approximately a quarter of a million residents, it is capable of producing a minimum enrollment of around seven hundred full-time day students within two years of operation; this would undoubtedly increase to at least eight hundred within a five-year period but might race upwards to as many as fourteen hundred within five years and close to eighteen hundred within ten. Lehigh's generally high economic status as a county and the relatively high family and per capita incomes both augur for a higher than average percentage of high school graduates attending college, given accessible opportunity. At present there are no comprehensive, low-cost colleges in the county, so the void is great.

Transportation is excellent; a college located on the outskirts of Allentown, convenient to the major east-west artery, could probably be reached in something like thirty minutes from almost any part of the county.

Financially a college is quite feasible, as a college of slightly over eleven hundred students could be supported, both for operating expenses at the rate of $850 per student and for capital outlay for a modern, attractive campus with complete educational facilities, with a tax of about 1 mill.

The instructional program for a college with an enrollment around a thousand would be adequate in breadth, although the number of specializations that could be offered might not be as adequate for a progressive industrial and business metropolitan area such as Allentown and its surrounding territory as would be possible with an enrollment twice as large.

Interest in having a college in Lehigh County is at a very high level, as evidenced by the testimony from lay and educational leaders at the hearing in Allentown. From all this, Lehigh would rate a high priority.

Northampton County

This County also presents a favorable potential for community college development. With a somewhat smaller population than Lehigh it actually produces a greater number of high school graduates, hence has a slightly greater enrollment potential for a community college. The minimum estimate for initial full-time enrollments (second year of operation) is around 850; the college undoubtedly would enroll close to a thousand students within five years, and given adequate facilities, it could grow very rapidly to some sixteen hundred students within that time and around two thousand within ten years.

Such an enrollment would, as with Lehigh, support a program quite adequate in breadth, although again as in the case of Lehigh, not as broad as could be developed in a considerably larger institution.

The total operating expenses and capital outlay for a complete campus would cost about a mill and a half in this county, certainly a feasible financial undertaking. Under these circumstances, were there a well developed Northampton County proposal before the State Board, it would rate serious consideration and probably a priority roughly equivalent to Lehigh's.

Lehigh Valley Community College

Lehigh and Northampton seemingly are closely related in many aspects of modern living. For many practical purposes residents are not aware of the line which divides the area into two separate administrative units; there is substantial cross migration for purposes of employment, travel, and leisure. Cooperation among many groups is evidenced in the several publications regarding joint ventures.

Ease of transportation between the two counties is one of the keys. The excellent high-speed east-west artery, coupled with adequate secondary roads, plus the fact that Allentown and Bethlehem are geographically one metropolitan area at the center of the two-county region, make travel time from outlying districts practically as fast to one city as to the other. Consequently, it would be relatively easy to get a centrally located community college from any place within the two counties (and, in addition, from a considerable portion of Schuylkill, Carbon, and Monroe).

Such a joint college for the Valley would attract a substantial enrollment. Our estimates show a minimum early enrollment of around 1,750 full-time students, almost certainly some 2,500 students within a five-year period, and around 3,000 in ten years. With the advantages of an attractive campus and the development of a broad, comprehensive program, these enrollments could prove to be drastically low. It is entirely possible that the three thousand full-time student enrollment could materialize within five years and in ten years the influx might approach four thousand. There is at present no low-cost, comprehensive college program in the area. And furthermore, the demand by youth for college opportunity is likely to be matched by an equivalent enrollment of part-time students seeking cultural, vocational, and academic opportunities in an accessible college.

Financially, a college with a complete campus for the 2,500 full-time enrollments could be financed by the two-county area with a tax in the neighborhood of a 1.2 mill average. Most assuredly a proposal for such a college would rate the highest priority based on need, feasibility, and promise.

Advantage of each alternative

Hard and fast assessments in such a complex situation are difficult. Nonetheless, certain advantages for each plan tend to emerge from the analysis presented above, brief as it has been.

A separate college for an identifiable area commands a certain amount of community pride; it constitutes a point of focus, and opportunity to identify with one's immediate neighbors. This is particularly true for a community college where the aspiration is to root the institution in its environs. While it is a bit more difficult to relate to a county as large as these two are than to a village or town or even small city, we are inclined to feel that there would be considerable identification.

Another factor worth consideration is that of smallness against bigness. Devotees of the small liberal arts college for several decades have been extolling the virtues of intimacy; while neither of the two institutions under consideration would be extremely small, there is no doubt that in separate institutions there would be somewhat greater intimacy possible between students, faculty and administration. It is difficult to say where the size of an institution begins to create distance between these three groups; it is true, however, that in general the larger the institution the more difficult it is to maintain the informal intimate spirit characteristic of the small institution.

Finally, with respect to separate institutions, there is the matter of independence. Each county can proceed on its own. In this case the proponents of the Lehigh College feel that they have worked hard and pushed ahead and made good plans and shouldn't be held back while waiting for the other county to catch up. Therefore, the advantage of independence in this situation is a real and important one.

For the cooperative Lehigh Valley College there would be several advantages. First of all, it would to some extent promote the feeling of solidarity of the entire valley; it would serve as a common institution for all, one more additional uniting force.

It would certainly provide the opportunity for a broader program of studies. A wider range of offerings in the arts and sciences as well as in career programs could be developed. Not only for full-time students but for part-time ones as well, there could be a considerably richer fare. Potentially, too, the larger single faculty could be more diversified than two separate ones--the greater program differentiation would justify this. Moreover, there could be greater specialization among the guidance and administrative staff than would be possible in the smaller institutions.

Probably one of the greatest advantages that would accompany size would be the potentially higher quality of the library and the instructional materials center. With imagination, the opportunity for experimentation with newer media of instruction could be much greater because of the possibility of diversified staff and greater range of materials.

And finally, there would be potential financial savings. It would actually be possible to have a higher quality library for less money per student in the larger setting; there is the possibility of saving on the administrative staff by eliminating the necessity for duplicate administrators at the higher salary echelons; certain common facilities which would be needed at both campuses would cost less for one; and certain instructional facilities, because of the higher rate of usage in the larger institution, might cost less.

The word "potential" has been used with most of these advantages because they are related in all cases to more than mere size; the greater enrollment would only make them possible. But it definitely would do just that.

Conclusion

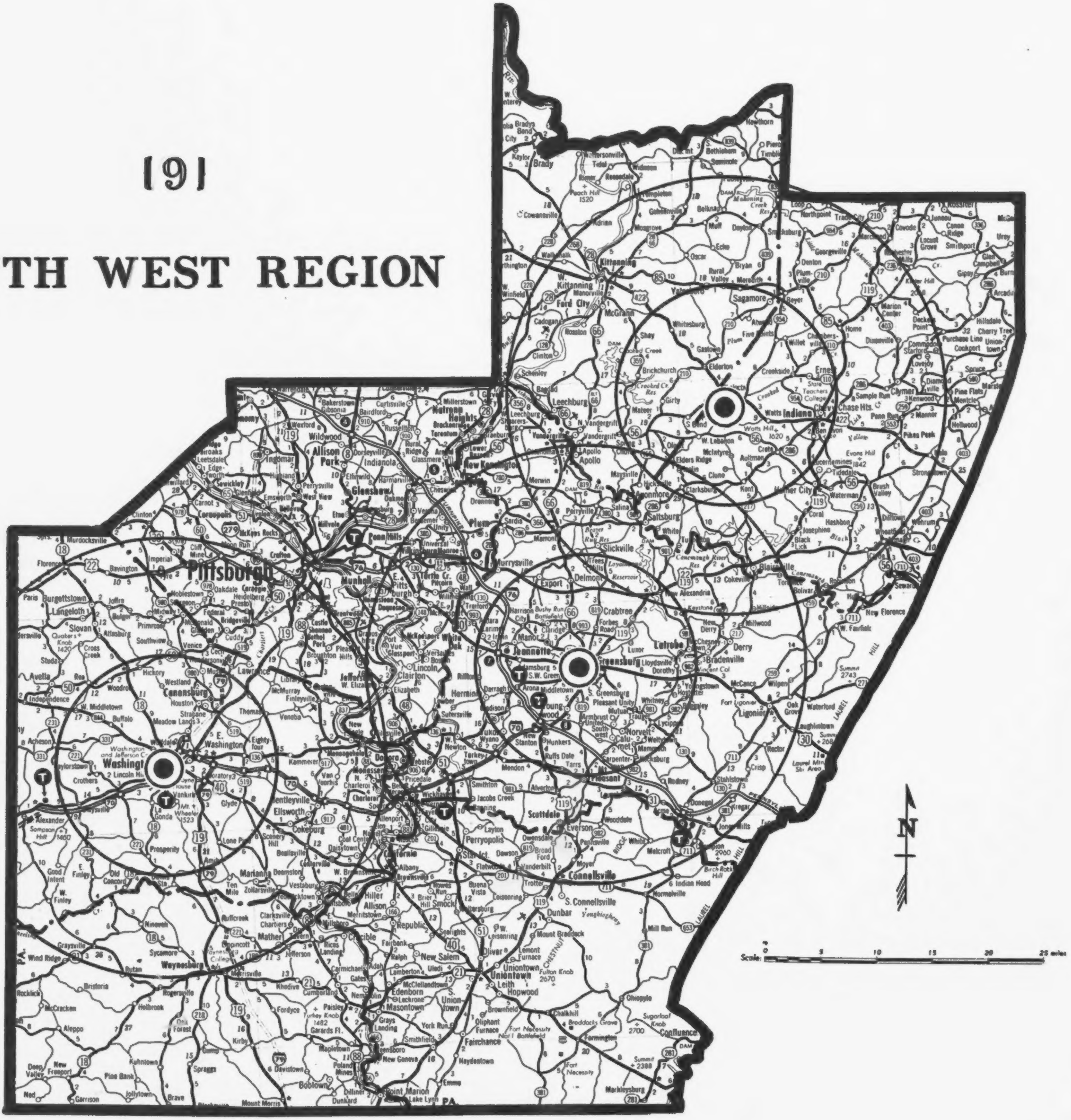
It appears rather clear that the potential advantages lie more heavily with the cooperatively planned college for the entire valley. Because of the ease of transportation a single college would be practically as accessible as separate ones, and financial savings, broader program, more adequate facilities, richer library, all seem possible.

One of the major arguments for a single college in this region is the spirit of cooperation strongly evidenced in many undertakings. The lack of joint consultation with respect to a potential community college would appear to be an unusual development, at least in relatively recent times. Probably many factors would be involved in a full explanation as to why no joint planning was attempted; certainly one of those would be the rather simple one of lack of communication. One group seems to have assumed that the other group was not interested; the other group seemingly assumed that when the proper time arrived, they would be invited to confer.

It would therefore appear reasonable to ask that the two counties undertake immediately cooperative exploration of the joint venture. It must be borne in mind, however, that cooperative ventures cannot be forced, even though they may appear advantageous. It might be wise to stipulate a reasonable time limit for such negotiations and, further, that if they should prove unproductive, Lehigh could then proceed on its own in time to open in 1966 in some type of temporary quarters and with a limited program. As in all such cases where temporary quarters are necessary, however, it should be with the firm understanding that the planning of a permanent, adequate campus would be started immediately.

[9]

SOUTH WEST REGION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South West Region

The southwestern part of Pennsylvania -- comprised of Allegheny, Washington, Westmoreland, Armstrong, Fayette, Greene, and Indiana counties -- is oriented towards the Pittsburgh area. The several counties within the region, however, differ from one another in respect to needs, availability of educational opportunities, and ability to finance higher education. Even from the most conservative estimates of enrollment potentials it is clear that (1) Allegheny should have a multi-campus arrangement for its large centralized population; (2) Westmoreland and Washington can support individual community colleges; and (3) the other counties vary in need and ability and should plan feasible cooperative arrangements to provide educational opportunities beyond the high school.

Allegheny County

Highly populous Allegheny County with its excellent roads and public transportation facilities amply warrants a multi-campus arrangement in which curricula are differentiated and students can, with relative ease, attend the campus where they may elect to study.

The five campuses suggested in the proposed plan for Allegheny County Community College (February 1964, p. 20) seem to be based on adequate guides respecting accessible service areas. Each campus, though varying in size, should probably be planned to serve a minimum of 3,000 students and should be assured of its full complement before successive campuses are opened.

Enrollment. Despite the number of institutions of higher education in the area, there is a gap between available resources and the needs and aspirations of a substantial number of youths. The most reasonable (Formula "B") projection indicates an enrollment of 8,000 to 9,000 students by 1970.

With all campuses in operation, an enrollment well in excess of 13,000 may be expected within a decade or so. The problem here will not be to seek students but rather to provide for them.

Financial feasibility. Using the 1970 Formula "B" enrollment figure of 8,569 students, annual operating and capital expenditures would amount to about $3,284,800, requiring a tax of 0.9 mills. The passage in May of the bond issue for capital outlay suggests that financing should be no problem in Allegheny County.

Program. Each of the several campuses should provide opportunity for lower division work in the arts and sciences and adequate library facilities to support transfer-oriented programs. While this seemingly involves some duplication of facilities, it is warranted by the diverse population and the general need to provide full opportunities for liberal and general education in each area. The technical curricula might, on the other hand, be judiciously allocated among the various campuses. Planning through survey research will probably indicate that certain expensive technical curricula need not be duplicated since the excellent transportation facilities permit extensive student migration.

Each campus probably should provide programs in transfer arts and sciences, pre-engineering, general education, and business. Added to these customary programs, one of the campuses might well specialize -- for instance, in health programs for nurses, dental assistants, and dental hygienists, medical records and medical secretaries, laboratory assistants, x-ray technicians, and related areas. Another campus might be oriented towards the food services and hotel management. A third might consider preparing engineering and scientific technicians, since the Pittsburgh area is one of the largest centers in the world for the application of nuclear power.

Priority. There is no doubt that Allegheny County is a first priority area for the establishment of community colleges. All factors point to the feasibility of establishing several campuses offering broad-range comprehensive programs with centralized administrative planning and coordination.

Washington-Greene

The combination of Washington and Greene offers another possibility. The completion of the north-south Interstate Highway 79 will make for greater accessibility. The population of Greene is located mainly in the north section of the county immediately bordering on Washington. Greene continues to have economic difficulties, with little manufacturing and a heavy concentration of unemployed workers in mining and related areas. Washington, on the other hand, is active in manufacturing and has considerably greater purchasing power.

Enrollment. According to Formula "B" 1970 enrollment projections of about 1,370 students, Washington could have a community college by itself. The inclusion of Greene would add another 200 students, which would result in some further broadening of curricular activity. Moreover, Greene County, unable to develop a college of its own, would be adequately served by a college located in or near the city of Washington. Commuting distance on the new expressway from the farthest population center in Greene County is under 30 miles.

Financial feasibility. Both counties could support the students they would send to the community college. Assuming 1,500 students within five years, operating costs would come to $425,000 and capital costs to $150,000 for a total annual cost of $575,000. A tax of 2 mills would support the college.

Program. In addition to the programs in liberal arts and sciences, business, and pre-engineering, emphasis should be placed on general education and on technically-related curricula, some of less than two years duration.

Priority. As yet there has been no community college activity in Greene County. Primary interest is in the establishment of an area vocational technical school, and some interest in the potential Pennsylvania State University Commonwealth Campus development in Fayette County. Washington is waiting for the State Master Plan before engaging in specific activity. It is, however, much interested in the community college idea and appears to be committed to it.

Fayette-Greene

The possibility of a joint undertaking by Fayette and Greene counties warrants a word. The centers of population are within 20 miles of one another but are connected by only a few good roads. High unemployment and low manufacturing activity mark the two counties.

The potential combined enrollments of the two counties may reach 800 within five years. Annual operating and capital costs of about $306,640 could be met by a tax of 1.4 mills. Fayette is interested in a community college but is presently building an area vocational technical school. The potential Pennsylvania State University Commonwealth Campus mentioned above has also served to delay further discussion of a community college.

Westmoreland-Fayette

The Westmoreland-Fayette combination is in some respects similar to the Washington-Greene arrangement. Less than 30 miles separate Uniontown and

Greensburg and road connections are quite adequate. In contrast to Fayette, Westmoreland is quite prosperous, both in terms of its own industry and as a major residential-suburban area of Pittsburgh.

Enrollment. Formula "B" projections for Westmoreland indicate some 2,500 potential students within five years, and this is conservative in light of the growth of the county. It seems appropriate, however, to use this figure since both Pennsylvania State University Commonwealth Campuses at McKeesport and New Kensington are planning expansions at this time. Fayette "A" projections of about 600 students within five years seem reasonable. Hence the Westmoreland-Fayette combination would result in a college with a potential enrollment of over 3,000 students within four or five years.

Financial feasibility. The annual cost to the sponsors for both the operating and capital expenses for a college with an enrollment of some 3,100 students would be about $1,189,000. A tax of 2.6 mills would be required to support the venture.

Programs. One of the strengths of a college of this size is its comprehensiveness. Several programs would be feasible in the arts and sciences, including provisions for pre-professional courses in engineering, business, teaching, nursing, and perhaps one or two others. Probably 8 or 10 semi-professional and technical programs should be developed at the associate degree level. While programs for medical and technical secretaries, executive secretaries, practical nurses, office managers, medical technicians and industrial technicians are suggested, other occupational needs peculiar to the area should be investigated periodically.

Priority. Fayette's position remains unclear for the reasons discussed earlier. Westmoreland is interested in and wants a community college if needless duplication can be avoided. The area vocational technical school in Westmoreland is well equipped and has a good program. Conflicting opinions are raised at present regarding the need for liberal arts programs. This conflict would be eliminated if the University of Pittsburgh Center at Greensburg would be turned into a locally autonomous community college. Such a move might prove possible and advantageous. Westmoreland, by itself or in combination with Fayette, needs a community college and a fairly high priority would be warranted when a local proposal is worked out.

Indiana-Armstrong

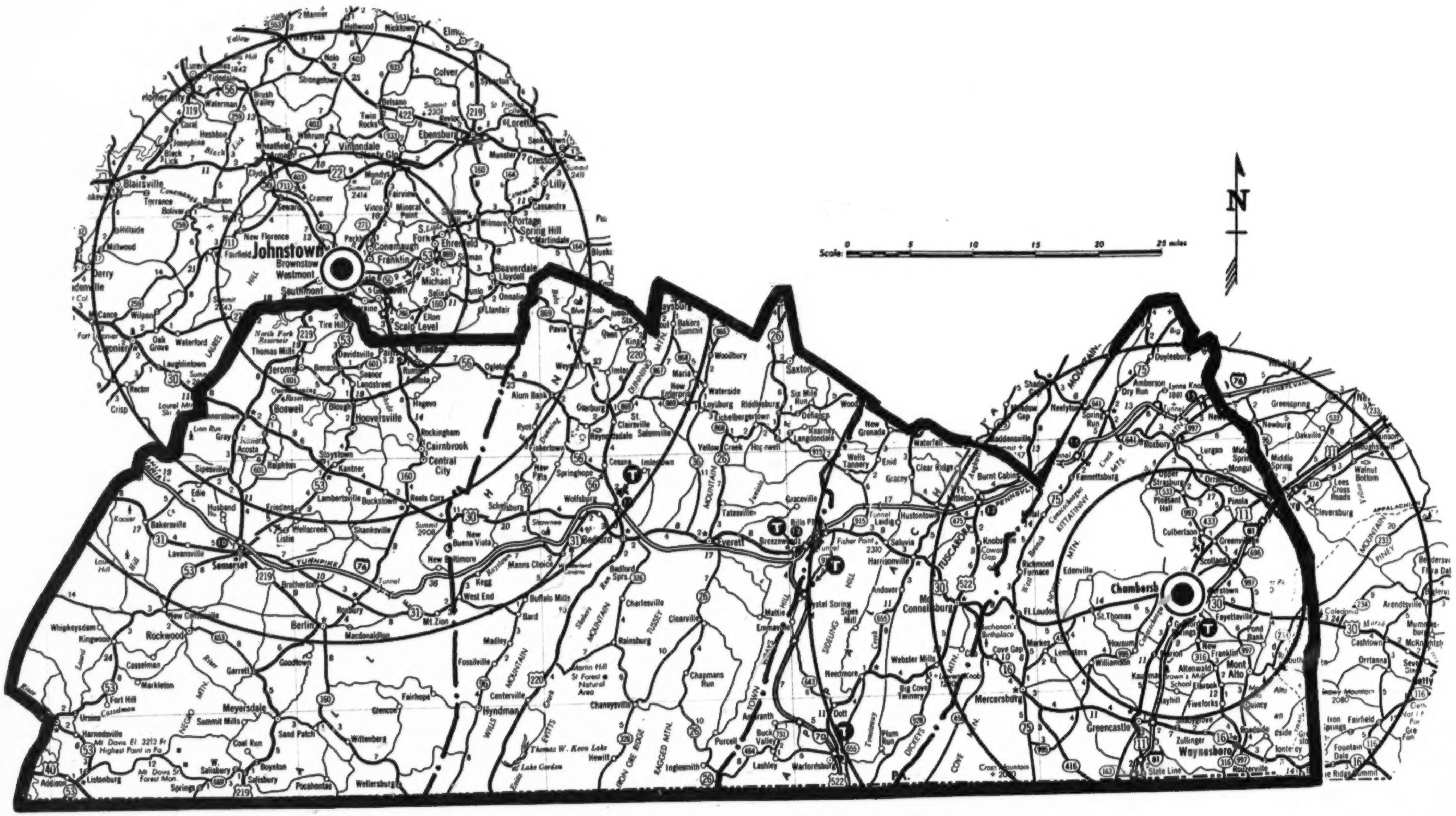
Armstrong and Indiana counties have a common border covering some 30 miles and crossed by Highways 422, 56, and 85. The two counties are similar in their high unemployment, low per capita and median family incomes, and very low college-going rates of 28% (Armstrong) and 25% (Indiana).

Formula "B" enrollments seem reasonable if the present college-going rate is to be improved. In Indiana County the Formula "B" projection of some 500 students seems quite reasonable, but the 500 students projected by this formula in Armstrong County might be lowered somewhat by the expansion planned for the Indiana State College extension center at Kittanning. A college of 800 students would be a minimum projection for the five-year period. Annual operating and capital expenses for such a college would come to about $306,000 and would call for a tax rate of 2.1 mills for the two counties combined.

Specific program planning should await the surveys being undertaken in the two counties. There is some indication in Indiana of growth in the electric industry and in some mining-related undertakings which may provide some direction for semi-professional curricula. Commonly provided transfer programs in the liberal arts and sciences and pre-engineering are indicated. In light of the present low college-going rate, provisions for general education and business and secretarial courses are recommended.

Priority. Feasibility and need would justify a moderately high priority if accompanied by public enthusiasm. The county studies should provide further insight regarding the latter.

[10] SOUTH CENTRAL REGION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Cresson
Lilly
Colver
Nicktown
Elmora
Vintondale
Twin Rocks
Nanty Glo
Blairsville
New Florence
Windber
Jerome
Davidsville
Boswell
Hooversville
Central City
Cairnbrook
Stoystown
Kantner
Shanksville
Somerset
Berlin
Meyersdale
Salisbury
Rockwood
Confluence
Addison
Garrett
Wellersburg
Hyndman
Centerville
Fossilville
Buffalo Mills
Bedford
Manns Choice
Schellsburg
New Buena Vista
New Baltimore
West End
Kegg
Mt. Zion
Everett
Breezewood
Saxton
Woodbury
Loysburg
Yellow Creek
Hopewell
Osterburg
Claysburg
Imler
Clearville
Rainsburg
Chaneysville
Inglesmith
Warfordsburg
Hustontown
McConnellsburg
Needmore
Burnt Cabins
Fort Loudon
Mercersburg
Chambersburg
Greencastle
Waynesboro
Fayetteville
St. Thomas
Scotland
Edenville
Mont Alto
Orrstown
Shippensburg
Doylesburg
Dry Run
Greenvillage
Marion
Upper Strasburg
Pleasant Hall
TURNPIKE
TUSCARORA
KITTATINNY MTN.
DUNNING MTN.
TUSSEY MOUNTAIN
SIDELING HILL
RAGGED MTN.
WILLS MOUNTAIN
NEGRO MTN.
LAUREL HILL
COVE MTN.
Mt. Davis El. 3213 Ft. Highest Point in Pa.

South Central Region

The South Central Region includes Franklin, Fulton, Bedford and Somerset counties. The region is mountainous and marked by generally low manufacturing activity, relatively high farm employment and some mining activity. Unemployment and low income are persistent regional problems, with Franklin County in rather better condition than the other counties of the region.

	Percent of 1964 High School Graduates		
County	Entering Col. or Univ.	Other post-secondary	Total post-secondary
Bedford	17.7%	17.1%	34.8%
Franklin	39.3	11.6	50.9
Fulton	19.0	24.9	43.9
Somerset	21.8	17.0	38.8

With a state average of about 50% of high school graduates continuing their education in some form of post-secondary institution, Franklin County is close to the state average while Fulton, Bedford and Somerset counties are well below.

Estimates of 1970 potential community college enrollments by county are:

County	Formula "A"	Formula "B"
Bedford	213	305
Franklin	501	712
Fulton	46	65
Somerset	360	512

Based on these projections Franklin County is a possible choice for a community college. Fulton County cannot support a college, but the possibility of Fulton County participating in the development of a college in Franklin is good.

Bedford County potential enrollments do not warrant a college in the county but are substantial enough to make a strong effort in participation with another county. Primarily due to transportation, cooperation with Somerset County seems more difficult than cooperation with Blair or Cambria counties to the north.

Somerset County barely meets the enrollment criterion for establishing a college. Primarily on financial grounds, a college does not appear to be feasible at present and cooperation with Cambria County to the north is a reasonable alternative.

Franklin-Fulton

Franklin County is the most populous and prosperous of the group, and has the largest percentage of high school graduates going on to post-secondary institutions of the counties in the region. The transportation net focuses on Chambersburg and is particularly good to the east, west and south of Chambersburg. The entire county lies within very reasonable commuting distance to Chambersburg.

Enrollment. Because of the relatively strong current college and university attendance by county high school graduates, enrollment projection for a community college in Franklin County should at the start be based on the minimum expectations, or an enrollment of about 500 students.

Fulton County cooperating with Franklin County, could be expected to contribute about 50 students in the initial stages. The highway net in Fulton County is well developed for commuting to Chambersburg with a maximum distance of about 30 miles and a maximum time of about one hour.

The combination of Franklin and Fulton counties would permit a small community college with an initial enrollment between 500 and 600 and a good possibility of reaching 800 or more within a reasonable period of time.

Adams County, and particularly the area west of Gettysburg, represents an additional possible area for cooperation with Franklin County if it is not incorporated into a York-Adams cooperative venture.

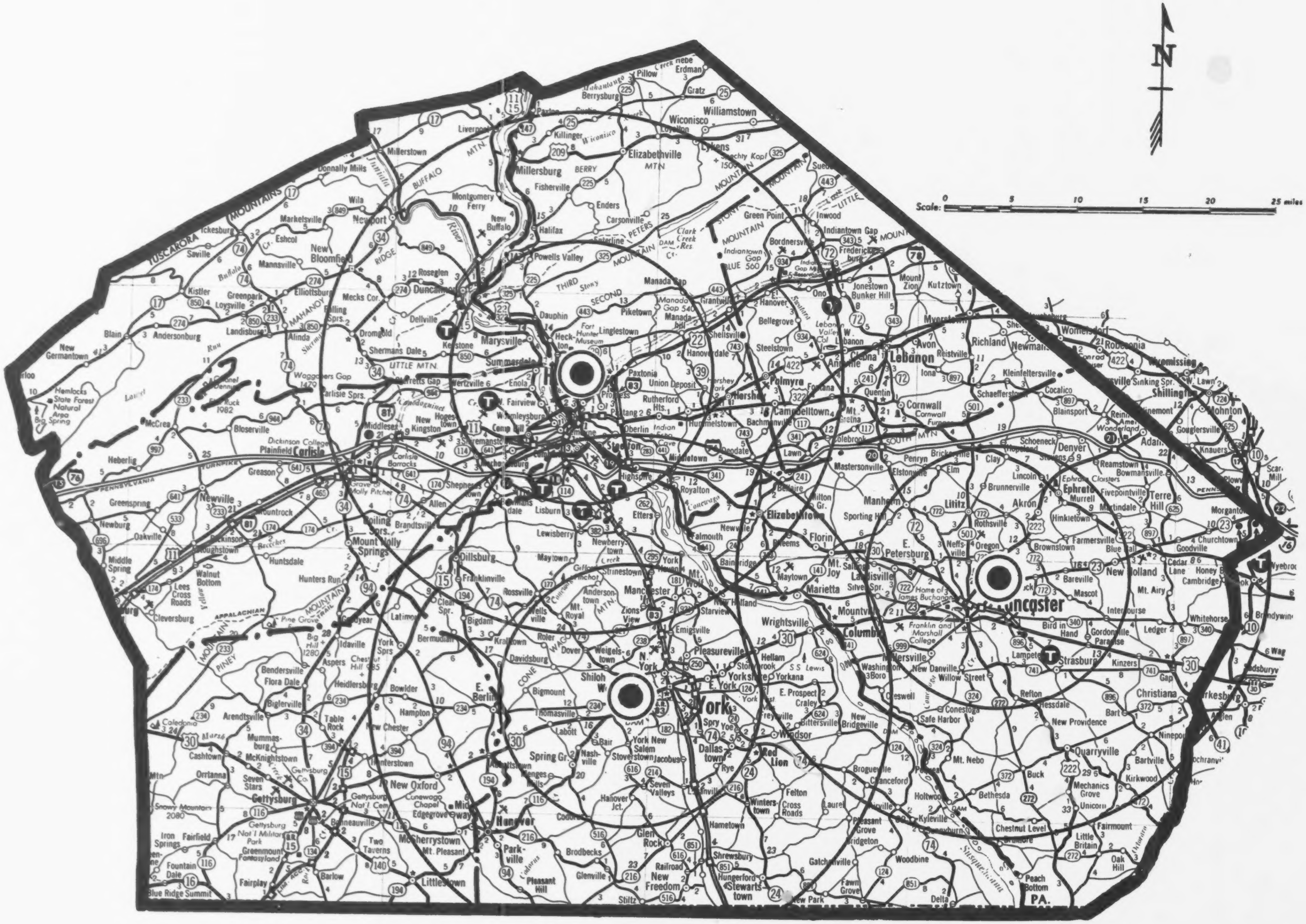
Financial feasibility. For an enrollment of 550 students the estimated cost to the sponsor to build, equip, and operate a college would be $211,000 per year. A tax rate of about 1.2 mills would be necessary to finance both capital and operating costs.

Program potential. Initially, a basic transfer program plus three to six semi-professional programs would be possible. Semi-professional programs in business and selected community-related specializations could be offered and should be based on results of a survey of the area.

Current status. At present, effort to establish a community college is not strong and priority for a college is secondary to the establishment of an area vocational technical school.

Summary. The possibility of a community college in Chambersburg serving Franklin and Fulton counties is real but of secondary priority. Bedford and Somerset counties are possible co-sponsors, with Cambria County, of a Johnstown area community college, and Bedford has the additional possibility of cooperating with Blair County.

[11] CAPITOL REGION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Boiling Springs
Mount Holly Springs
Dillsburg
Hershey
Palmyra
Annville
Lebanon
Campbelltown
Middletown
Highspire
Steelton
Elizabethtown
Mount Joy
Marietta
Columbia
Manheim
Lititz
Ephrata
Akron
Denver
Adamstown
Lancaster
Strasburg
New Holland
Millersville
Quarryville
Christiana
York
Red Lion
Dallastown
Wrightsville
Manchester
Hanover
Gettysburg
New Oxford
Littlestown
Glen Rock
Shrewsbury
Stewartstown
Delta
Peach Bottom
PA.
TUSCARORA MOUNTAINS
BLUE MOUNTAIN
SOUTH MTN.
PENNSYLVANIA TURNPIKE
Susquehanna
Juniata
T

Capitol Region

By definition the capitol area consists of those seven counties which have proximity or orientation to the State Capitol at Harrisburg: Dauphin, Perry, Cumberland, Lebanon, York, Lancaster, and Adams. In the main, these counties have relatively stable populations, low unemployment and high manufacturing and service employments. The whole area has three principal cities which form a triangle in relation to the Susquehanna river, which bisects the region. Each of these cities provides a focal point for the surrounding area. And each should probably be the location of a substantial community college.

Dauphin-Perry-Cumberland (Harrisburg Area Community College)

Presently, the Harrisburg Area Community College is located in Harrisburg on Highway 22. It serves a majority of the school districts in Dauphin, Perry, and Cumberland counties. Opening enrollments as of September 1964 were in excess of 400 students. Second-year estimates indicate that over 1,000 will be in attendance, and projections for 1970 indicate that around 2,500 to 3,000 full-time students are quite likely, augumented with an approximately equal number of part-time students.

The institution is being planned with this expansion in mind and a site of 150+ acres has been secured. Architectural plans are now being produced and ground-breaking is expected to occur before the year is out.

As far as program is concerned, the Harrisburg Area Community College has the potential to be fully comprehensive. There are at present transfer programs in liberal arts and sciences, pre-engineering, pre-medical and dental, and business administration; several major technologies are offered, including medical, nursing, police science, accounting, and engineering-related technologies. The response to these varied offerings has been quite good and there are many indications that Harrisburg Area Community College is satisfying identified educational needs in the three county area. The rapid development of this community college is drastically affecting the Pennsylvania State University Commonwealth Campus in Harrisburg. Its future plans should be based on the assumption that the community college will meet the broad needs at the lower division level, and the Pennsylvania State University Commonwealth Campus should concentrate on specialized needs above that level.

The school district organization sponsoring Harrisburg Area Community College has proved fairly successful, although one major limitation is that some districts in the three counties are not included. This seems short-sighted planning on the part of the district officers and efforts should be made to have them join as sponsors. Two solutions present themselves: (1) that the three counties as wholes take over support, and (2) that these districts be absorbed in larger jointures. This seems most likely due to present reorganization plans and the relative consistency it permits in the pattern of sponsorship by school district.

Lebanon

Lebanon County, in large measure bordering on Dauphin, should be studied for the possibility of coming into the Harrisburg Area Community College. The road system offers excellent connections east-west on Routes 22, 422 and 322. From the farthest point in Lebanon the distance is only 30-35 miles and the commuting time 40-45 minutes. However, there might be cultural ties with Lancaster that should be considered.

Lebanon, according to Formula "B", could contribute 535 students yearly by 1970. This enrollment is much too small to justify an independent institution, but the addition of 500+ students to Harrisburg would mean and expansion of one sixth, which adds to the potential comprehensiveness of the already established college. A tax rate of 1.2 would be sufficient to support 500 Lebanon County students.

Lebanon could not justify a separate institution so near to an existing one, so its priority needs to be assessed as a potential addition to Harrisburg Area Community College. From the standpoint of need and feasibility it would rate high, but the lack of local interest and concern lowers this somewhat. A moderate priority would seem to be a fair one.

Lancaster

Lancaster County probably should have its own community college. It has a growing population, low unemployment, high manufacturing orientation, high socio-economic status (first of six socio-economic ranks by State Planning Board), and a low college-going rate (31%). The county has as its geographic, transportation, and population center, the City of Lancaster, which appears to be an ideal location for a county community college.

Formula "B" is felt to be a reasonable estimate of the probable community college enrollment, since the state college at Millersville and the three private colleges in the county do not fulfill the needs that the community college would meet. For an enrollment of around 1,700 students a tax rate of 2.1 would finance annual operating and capital costs of $657,500. This amount seems reasonable in this county, where the assessed valuation is only 29% of the total market value.

A 1,700+ student institution can be quite comprehensive with a full range of transfer programs, general education, and provisions for some eight to ten technical curricula. These may well include the para-medical fields, the business specialties, and some specialties such as drafting and design and the engineering technologies. A high demand for adult courses and community services may also be met.

Priority. There is considerable long-range planning going forward in Lancaster County. An area vocational technical school is under active consideration at present and energies are now being channeled in this direction. There has been general discussion of the possibilities of a community college but no active committee exists to date, although interest is high and the need for a community college facility is realized. A moderately high priority would characterize it best at the present time; but an organized local effort would put Lancaster into a still higher priority.

York-Adams

York and Adams counties are geographic neighbors with major population centers connected by Route 30. Both counties are high in socio-economic status, substantial manufacturing, a growing population, and a low unemployment level. York is the main population center and is the geographic and transportation center of York County. The distance from Gettysburg to York is under 30 miles; this distance encompasses the major areas of Adams; the City of York thus seems the most likely place for a community college.

The enrollment for York under Formula "B" indicates 1,559 students; for Adams it indicates 366 students. Thus while York might support a separate community college, Adams definitely could not. It seems highly appropriate therefore to consider the cooperative possibilities. Formula "B" provides a reasonable enrollment estimate if the Pennsylvania State University Commonwealth Campus at York remains much as it is.

Two other variables operating in this area are (1) the possible development of York Junior College into a four-year institution, and (2) the expansion of the planned area vocational technical school in York to the 13th-14th year. An expanded York Junior College would attract a proportion of the local students, but costs as well as higher entrance requirements than those visualized as appropriate for the community college would be deterrents. Joint planning should be undertaken with the area vocational technical school in order to avoid duplication; close cooperation could enhance the programs at both institutions.

The tax rate for the two counties combined would be 3.1 for an estimated total enrollment of 1,950 students.

A community college with around 2,000 students would be able to offer a quite comprehensive curriculum. Besides the traditional transfer work in the liberal arts and sciences, business, and other pre-professional areas -- and a general education program -- the college might well offer ten or twelve technical curricula, including possible emphasis on agricultural technology (due to Adams' comparatively large employment in farming), some programs in the vitally needed nursing and para-medical fields, and some of the engineering and drafting technologies.

Priority. School people in York are actively interested and have conducted some studies in conjunction with extensive area vocational technical school developments to which they are presently committed. Adams people recognize the need for cooperation with a neighbor, and York is seemingly the best possibility. Adams County is also exploring vocational-technical possibilities. While the development of area vocational technical schools and the possibility of York Junior College expansion are presently occupying time and energy, the community college is by no means being neglected. The present priority, based on high potentials but little planning, could easily be raised to a very high priority if local initiative and enthusiasm for a community college develop soon, as evidence that local action may also be forthcoming in the near future.

South East Region

The southeastern region of Pennsylvania is comprised of five counties: Philadelphia, Bucks, Montgomery, Delaware, and Chester. The combined wealth, measured either in terms of personal income or assessed property valuation, of these five counties comprises almost 40% of the wealth of the entire state of Pennsylvania. This region also contains some 32% of all the population of Pennsylvania in a land area that comprises less than 5% of the State.

This highly concentrated population is by no means homogeneous. Each county has its problems and its diverse needs.

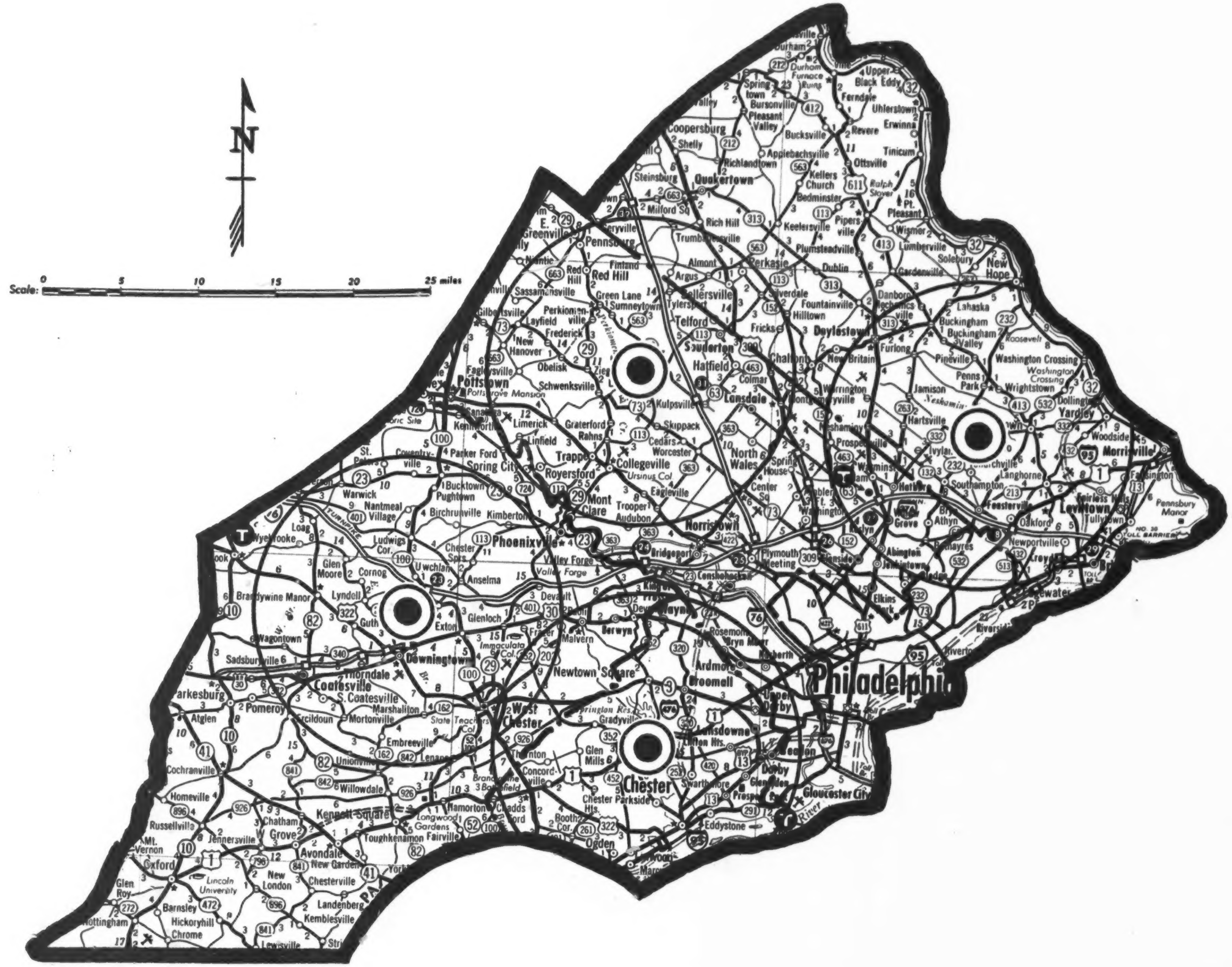
Bucks County

Bucks County is one of the most rapid growth counties in the State of Pennsylvania. An increasing high school population, and the probable doubling of the entire population by 1980, create extensive needs for higher educational opportunity in the county. Thus, full-time enrollments in a community college could certainly be expected to reach 1,000 students during its second year of operation; 3,000 (Formula "C") students by 1970 are entirely probable. Further increases, due to Bucks fast growth rate, will probably put enrollments in excess of 4,000 within a decade. Part-time enrollments should easily match this.

An application based on extensive study and survey of the county -- clearly indicating the desirability and suitability of establishing a community college -- has been approved and the facility is expected to open in September 1965.

Bucks County Community College will provide a full transfer program in the arts and sciences, a broad offering of technical and semi-professional

[12] SOUTH EAST REGION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Perkasie
Pennsburg
Collegeville
Royersford
Spring City
Valley Forge
Bridgeport
Conshohocken
Media
Kennett Square
Oxford
Avondale
Levittown
Morrisville
Yardley
New Hope
Newtown Square
Malvern
Berwyn
Ardmore
Lansdowne
Gloucester City
Eddystone
Hatfield
Telford
North Wales
Abington
Willow Grove

career programs, and a rich and varied offering for adults. It should be able to take care of all these needs of the county for the forseeable future.

Montgomery County

Montgomery County is similar to Bucks in that it too is growing rapidly. The presence of a number of institutions of higher education in the County probably helps to account for the high college going rate of 47.5%; the 13.4% rate of attendance at other post-secondary institutions is lower than the state mean. The remarkable growth in the high school graduating population and the increasingly large number of students who will want and need some form of higher education, will require not only additional facilities for higher education, but a greater variety of educational opportunities.

A community college has been approved and in light of the county's general posture, it will in all likelihood increase rapidly in enrollment. A realistic projection for 1970 would put full-time student enrollments in the 3,000-4,000 range; an enrollment of 6,000 in a decade is quite probable. Here, as in Bucks, part-time enrollments will easily double this figure.

Philadelphia

The Community College of Philadelphia is well underway. Classes will begin in all divisions in September 1965. Facilities have been provided for 750 full-time students and some 1,000 part-time students. These facilities are expected to grow within the next year to accomodate 2,000 full-time students. Financial arrangements seem to be more than adequate at present.

By 1970, facilities should be provided for at least 8,000 to 10,000 students; part-time enrollments in the community college are expected to outstrip the full-time by 1970, and will require extensive and careful planning. A multi-campus college is called for. The downtown campus should provide, among other offerings, specialized day and evening courses. Indeed, the acquisition of appropriate sites and the development of additional campuses is probably the most pressing consideration at this time.

Chester County

Chester too is in some ways similar to Montgomery and Bucks. It has a rapidly growing population, more rural than Bucks. It is characterized by low unemployment, high socio-economic status, and a high proportion of students going on to college (nearly 43%) and other post-secondary institutions (14%).

Formula "B" projections for 1970 indicate a potential enrollment of 1,447 students -- certainly adequate to provide a fairly comprehensive curricular offering in transfer, general education, and technical areas. But Formula "C" is not unreasonable since commuting within the county is good. This would increase enrollments to 1,740 full-time students by 1970. The operating and capital expenses for the "B" enrollment figure for 1970 come to about $554,700. This would entail a tax rate of 1.5 mills. Formula "C" would demand annual expenses of $667,000 and a tax rate of 1.8 mills.

Without duplicating existing programs, suitable broad offerings could be developed that would present many educational opportunities not presently available to Chester residents.

A question arises as to priority. The school leaders presently have had their sights on an area vocational technical school, which has occupied their attention to the extent that no assessment has even been attempted to determine either need, desire, or feasibility of a community college. This lack of interest constitutes a serious obstacle at this point. Priority has to be lower than the need would justify.

Delaware County

Delaware County is growing rapidly both in terms of its own industrial expansion and as a very major suburban area of Philadelphia. Its high school student population is also increasing rapidly, as is the percent of students who aspire to some form of higher education. But the colleges and universities in the Delaware area are straining to meet the present demand, and plan for even greater pressures in the furture.

Formula "B" enrollment projections suggest more than 3,500 students within five years. However, Formula "C" (4,300) may be more appropriate in view of the population density and decided need. Well over 5,000 students should be enrolled within a decade. This calls for a comprehensive institution, offering a range of programs that would include many of the areas and services discussed in Section I of this report.

The Delaware County Community College Plan indicates that consideration has been given to the importance of an appropriate site. The Plan is notable for its realistic treatment of the financial arrangements involved in planning for a community college of high quality. This is reflected in the salary projections as well as in the estimates of building, site, and maintenance costs.

It is expected that the operating and capital costs of a college with a potential enrollment of some 3,500 students could be supported by a tax of 3.1 mills.

In spite of the quality of its Plan, the Delaware undertaking has been delayed somewhat by the uncertain status of certain sections of the Community College Act of 1963. When these are corrected, and they do seem well on the way to being remedied, Delaware County will probably move ahead rather promptly with the perfection of a proposal based on a college to be sponsored by school districts. The county commissioners seemingly are not interested in sponsoring a college at this time.

Areas with high community college potentials

The areas with high potentials are shown on the accompanying map by similar markings, except for a few counties considered as possibilities for two areas, i. e., Crawford, Columbia, and Monroe counties:

1 Erie - Crawford - Warren

2 Cameron - Elk - McKean - Potter

3 Lycoming - Bradford - Clinton - Columbia - Montour - Northumberland - Snyder - Tioga - Union (Williamsport Area)

4 Lackawanna - Monroe - Pike - Susquehanna - Wayne - Wyoming

5 Mercer - Crawford

6 Venango - Clarion - Forest

7 Luzerne - Carbon - Columbia

8 Lawrence

9 Butler

10 Armstrong - Indiana

11 Dauphin - Cumberland - Perry (Harrisburg Area)

12 Lancaster - Lebanon

13 Berks - Schuylkill

14 Lehigh - Northampton - Carbon Monroe (Lehigh Valley)

15 Beaver

16 Allegheny

17 Washington - Greene

18 Westmoreland - Fayette

19 Cambria - Bedford - Somerset

20 York - Adams

21 Chester

22 Montgomery

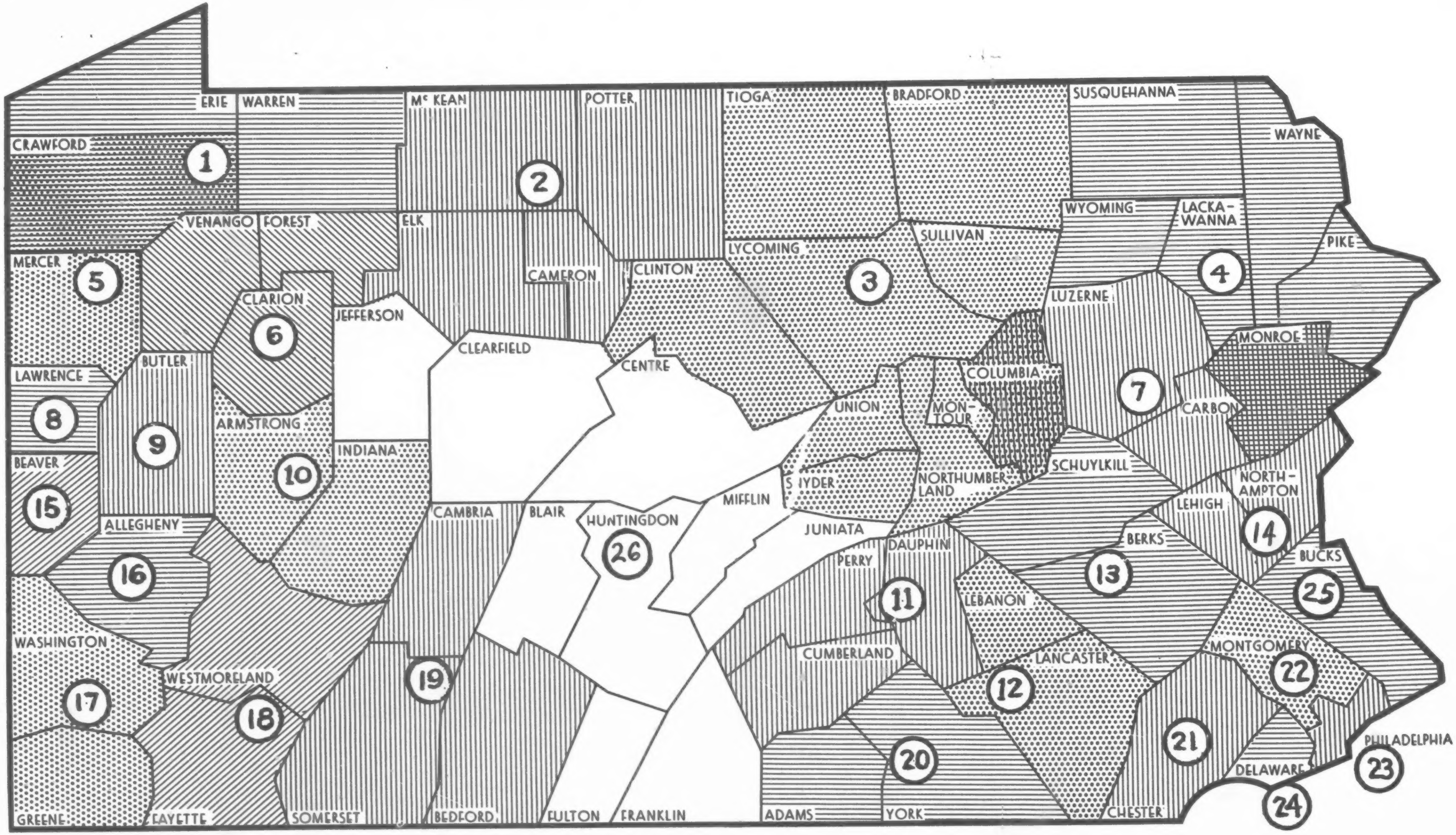
23 Philadelphia

24 Delaware

25 Bucks

26 Nine counties that have not been classified as clear potentials

PROPOSED COMMUNITY COLLEGE AREAS


ERIE
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SUSQUEHANNA
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FOREST
ELK
WYOMING
LACKA-WANNA
PIKE
MERCER
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CAMERON
CLINTON
LYCOMING
SULLIVAN
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4
CLARION
6
JEFFERSON
LUZERNE
MONROE
CLEARFIELD
CENTRE
COLUMBIA
7
LAWRENCE
BUTLER
8
9
ARMSTRONG
UNION
MON-TOUR
CARBON
INDIANA
10
BEAVER
15
SNYDER
NORTHUMBER-LAND
SCHUYLKILL
NORTH-AMPTON
MIFFLIN
LEHIGH
ALLEGHENY
CAMBRIA
BLAIR
HUNTINGDON
26
JUNIATA
DAUPHIN
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PERRY
BERKS
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BUCKS
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LEBANON
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WASHINGTON
CUMBERLAND
LANCASTER
MONTGOMERY
WESTMORELAND
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21
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PHILADELPHIA
DELAWARE
23
24
GREENE
FAYETTE
SOMERSET
BEDFORD
FULTON
FRANKLIN
ADAMS
YORK
CHESTER

C. SUMMARY OF PRIORITIES FOR COMMUNITY COLLEGES IN PENNSYLVANIA

Having completed the canvass of the 67 counties of the Commonwealth by regions, we can now sum up the potential for community colleges in Pennsylvania. Rather than reviewing them by regions, however, we have listed them by groups according to the priorities discussed in the county-by-county canvass. The reader will recall that our priorities were based on the several criteria set forth in the introduction to Section II. These criteria can be summarized as "need," "feasibility," and "community interest."

Through this process we established four groups of colleges. While these groupings are broad in the sense that colleges within each one will vary significantly in certain respects, we think that they may help the reader to see more clearly the probabilities of community college development in Pennsylvania.

Group I: Areas which have applied for community colleges

In this group we have the following colleges which have been approved and are either established or being established:

- Bucks County Community College
- Butler County Community College
- Harrisburg Area Community College (Cumberland, Dauphin and Perry counties)
- Montgomery County Community College
- Philadelphia Community College
- Williamsport Area Community College (all or parts of Bradford, Columbia, Clinton, Lycoming, Montour, Northumberland,

Snyder, Sullivan, Tioga, Union counties)

Three other proposals have been submitted to the State Board of Education, and are either being considered or revised:

Allegheny County

Beaver County

Lehigh County

Group II: Areas where colleges are needed and feasible, and where community interest has been identified; applications appear likely within a reasonable period of time

Berks County (with possible participation of Schuylkill County)

Delaware County

Erie County (with possible participation of either Warren or Crawford counties)

Lawrence County (individually if cooperation with Beaver County does not materialize)

Lehigh Valley (if cooperative venture materializes: Northampton individually if it does not; with possible participation of all or parts of Carbon and Monroe Counties)

Luzerne County (with possible participation of all or parts of Carbon and Columbia counties)

Washington County (with possible participation of Greene County)

Westmoreland County (with possible participation of Fayette County)

York County (with possible participation of Adams County)

Group III: Colleges needed and apparently feasible but community interest not developed very far and plans may take longer to mature into applications

Armstrong - Indiana counties

Cambria - Bedford - Somerset counties

Cameron - Elk - McKean - Potter counties

Chester County

Lackawanna County (with possible participation of Wyoming, Susquehanna, Wayne, Pike, Monroe counties)

Lancaster County (with possible participation of part of Lebanon County)

Mercer - Crawford counties (either cooperatively or individually)

Venango - Clarion - Forest counties

Group IV: Counties or areas with varying problems: action does not appear imminent

Blair County

Clearfield and Centre counties

Franklin and Fulton counties

Huntingdon County

Jefferson County

Parts of Juniata and Mifflin counties

This listing brings the present situation in Pennsylvania into sharp focus as follows:

1. Six colleges have been approved since the passage of Act 484 in 1963; one of these has been in operation this academic year; three plan to

open their doors this coming fall; one, Montgomery, hopes to open in February, 1966; one, Butler, is scheduled to open in September, 1966.

2. Three counties, Allegheny, Beaver and Lehigh have applications either pending or being revised.

3. Nine areas or counties have been assessed as having high priority based on need and feasibility, and sufficient evidence of community interest and activity to make it appear probable that applications would be formulated within a fairly short period of time.

4. Eight areas or counties have high priority based on need and feasibility, but it would appear that the development of community interest and concern and the formulation of applications would be likely to take a longer period of time. Two others, (Bradford and Northumberland), involved partially in the Williamsport Area Community College, may each in time constitute the nucleus of an area college.

5. Nine counties, considered separately and as potential cooperative ventures, would seem to have sufficiently difficult problems to make it impossible at the present moment to foresee the establishment of community colleges in the immediate future. It is always feasible, however, for vigorous community action to overcome difficulties and this is a possibility in some of these areas.

6. In sum, 26 areas have been identified as having the clear potential for developing community colleges in the reasonably near future.

SECTION III

ESSENTIALS FOR DEVELOPING A STATE SYSTEM OF COMMUNITY COLLEGES IN PENNSYLVANIA

A. STATE ORGANIZATION AND CONTROL

Introduction

Our examination of the potentials for community college development in the State of Pennsylvania has been made with certain assumptions in mind regarding the place of community college education in a state structure. In order to make our analysis of the essentials for statewide development meaningful, it is necessary that we share our basic assumptions regarding certain organizational matters in relationship to community colleges.

During the development of public junior colleges and community colleges in the United States, there has been a great deal of argument as to whether such institutions are secondary, higher, or unique. Our position is clear. While in the early years public junior colleges derived a good deal of their basic strength from their close association with high schools, mid-twentieth century trends underscore the need to consider community colleges as an integral part of our system of higher education. Three compelling trends clearly point in this direction.

(1) The increasing proportion of the college-age population (18 to 21) which is moving determinedly into post-secondary institutions, thereby reducing steadily any conception that higher education is only for an intellectual, economic or social elite. The community college, as noted in an earlier section of this report, is playing a very important role in the democratization of higher education in this country.

(2) The fact that the first two years of academic work offered by community colleges must be equivalent in content and quality to the first two years of similar work in four-year colleges and universities. The number of individuals who enroll in community colleges to complete two years of their baccalaureate studies is increasing every year. To maintain this standard of equality, two year colleges must be closely associated with the four year ones.

(3) The steadily widening range of occupations which require collegiate preparation, as presented in some detail in Section I. This trend adds greatly to the potential comprehensiveness of the community colleges as colleges.

In view of these trends, indeed these developments, the position that a state system of community colleges must be an integral part of the total system of higher education appears both logical and sound. This does not mean an aloofness to secondary education or "vocational" education; it does mean, however, that the main functions of the community college are to be accomplished on the intellectual foundations developed by secondary institutions.

As an integral part of higher education, therefore, community colleges should be organized and controlled by the same state board that controls the entire state system of higher education. In a few states separate state boards for community colleges have been established. We do not believe that this would be a sound development for Pennsylvania. We feel that the community colleges will derive strength from their relationship to the rest of higher education through being responsible to the same state-level board.

Another observation is appropriate at this point. In an increasing number of states responsibility for higher education is being lodged with a state board for higher education. The argument for establishing a separate board is based more on practical than on theoretical considerations: the complexities of higher education make the control of that educational enterprise so demanding and so time-consuming that a single board simply cannot discharge these responsibilities in this connection in addition to those associated with elementary, secondary and vocational education. The members of the newly organized State Board of Education in Pennsylvania, and especially those who serve as members of the Council of Higher Education, may find themselves in considerable agreement with these sentiments. This question, however, is a more appropriate one for the Master Plan Study than for the present report; our position here is that whatever state board is responsible for higher education should be responsible for community colleges at the statewide level. Throughout the balance of this section, therefore, we shall use the term State Board to signify whatever state board is the product of the Master Plan and its enactment. As long as the State Board of Education is functioning in this capacity, the implementation of the policies and regulations regarding community colleges may be delegated frequently to the State Council of Higher Education, but the final authority for such actions remains with the State Board. Consequently, we will not try to differentiate in this discussion, but will use the generic term, Board, or State Board.

In the present section, the overall statewide organizational pattern will first be examined fundamentally in relation to the question, "How shall the community colleges be organized and controlled as a state system?" We have found it helpful in dealing with this question to analyze the roles of the four groups which bear the major responsibilities for these colleges: The State Board, the professional staff at the state level, the local boards of trustees, and the presidents of these institutions. Following that analysis, we will turn to the organization of local college districts and then to the governanace of the local colleges. Next, the complex problem of financing community colleges in Pennsylvania will be explored; special attention will be given to the relationship between local trustees and local sponsors. Statewide problems regarding programs of instruction, student personnel services, and community educational programs will also be briefly analyzed. Section III will close with some observations regarding legislation which is needed if the long-term development in Pennsylvania is to be in the directions indicated in the present analysis.

The role of the State Board in relation to community colleges

1. The State Board must study continuously the State's needs in higher education and develop recommendations to the governor and the legislature for laws to meet these needs.

Since the State Board bears responsibility for the direction and coordination of all higher education in the State, recommendations for legislation should come from it as the board responsible for higher education. Its suggestions will deal primarily with educational policy and financial support for higher education. The Board, being relatively detached and uncircumscribed by assumptions appropriate for a single institution, should be able to render objective and sound advice for the legislative expansion and refinement of the State's role in higher education. In order to discharge this responsibility, the State Board must inaugurate and supervise the completion of periodic studies of the State's changing needs for post-high school education. Economic and social needs in Pennsylvania will shift rapidly in the years ahead. Such changes will require institutional adaptation based upon careful study and planning by the Board. This is peculiarly true with respect to community colleges, and the State Board's ability to keep abreast of such changes and institute relevant policy changes as needed is of particular significance.

2. The State Board should serve as the primary avenue of communications between community colleges and the governor, legislature, executive departments, federal government, other state colleges and universities, and the citizens of the State.

Since one of the primary functions of the State Board is communication and coordination, it is apparent that it must be responsible for continuing dialogues with governmental agencies, colleges and universities, and the citizens of the State, regarding the establishment, growth and sustenance of community colleges. Such communication will be both more effective and efficient when centered in the Board, thereby avoiding the necessity for representatives of each institution to work individually with representatives of state and federal government. Channeling all communications regarding overall policy matters and key relationships through the State Board should contribute significantly to the evolution of rational policies and procedures of primary importance to community colleges.

3. The State Board should formulate policies regarding the general purposes of community college education, types of educational programs to be provided, admission of students, coordination of educational activities among community colleges, and relationships with other state colleges and universities and with elementary and secondary education.

Policy formulation by the State Board should have as its primary purpose the stimulation of economical and effective educational programs in community colleges. This requires that the Board define the educational role of community colleges and their relationships with other institutions of public and private education. In order to do this, the Board must delineate the educational objectives to be achieved, the types of programs which are needed, the students who will be served, and the implications for the communities which support such colleges. The Board should strive to eliminate overlapping and duplication of efforts among four year colleges, community colleges, and secondary schools.

4. The State Board should bear the responsibility for developing state plans, rules and regulations required for granting and disbursing federal funds.

The federal government requires specific state plans, rules and regulations before such funds are made available to the state. The Board should be responsible for the development of such material to conform with federal regulations.

5. The State Board must approve the disbursement of state and

federal funds to individual community colleges in accordance with rules and regulations which conform to state and federal laws and which insure the proper use of such public funds.

Financial support and influence from the federal government is important not only now but will increase significantly in the immediate future. Federal laws and regulations require that some state authority be responsible for the receipt and disbursement of federal funds in accordance with federal requirements. The Board should provide the bridge between public higher education, including community colleges, and federal agencies with regard to overall policies and procedures. Since federal funds will determine, at least to a certain extent, the course of higher education in the State, the Board should have control and direction in this important area. Financial support and educational policy go hand in hand, and one is meaningless without the other. In order for the Board to implement coherent educational policies for all of higher education it should distribute the available financial state support to all community colleges.

6. The State Board should stimulate the planning and development of new community colleges, rule on the establishment of new institutions, and accredit new institutions at the time of establishment.

If the Commonwealth is to have a community college system adequate to its educational needs, the State Board must be responsible for planning, establishing, and accrediting such institutions. It is apparent that some central state body must stimulate the development of new institutions as needed, but it must make certain that such colleges are placed in proper geographic juxtaposition with other colleges and with concentrations of population. The commonwealth can not afford to establish an unlimited number of colleges without regard to cost, institutional size, or educational needs. In order to assure the acceptance of new colleges by other institutions of higher education and by the public, the Board should develop a state accreditation procedure for such colleges. Minimum requirements for state accreditation should be established and all such institutions should be encouraged to apply for and achieve regional accreditation by the Middle States Association of Colleges and Secondary Schools within a reasonable period (six years) after establishment.

7. It should be the responsibility of the State Board to select and employ under the provisions of the State's civil service regulations, all professional staff serving the Board.

The professional staff serving the State Board should be made up of highly competent professional personnel conversant with higher education and accepted by their professional colleagues. This should include staff members qualified to give leadership in community college education. In order to retain qualified individuals, professional competency should be the only consideration; there should be no political considerations whatsoever. The State Board should be responsible for establishing the qualifications for the professional personnel and for their appointments within the provisions of the civil service regulations, except for policy officers exempt from such regulations. After appointment, all professional personnel should be responsible to the State Board and under the direction of the Board's chief executive officer.

8. The State Board should develop and submit annually to the

governor a proposed budget for the State's share of the annual operating and capital expenses needed by the community colleges of the Commonwealth.

The State Board should be responsible for the compilation of the state community college budget for annual operating and capital expenses for each biennium. Community colleges should submit their budget requests to the State Board. All such budgets should then be combined into a single recommendation for capital and operating funds and submitted to the governor and the legislature by the Board. Since no individual community college budget would be before the governor or the legislature, community college officials should not be encouraged nor find it necessary to establish liaison with executive departments or the legislature.

9. The State Board must formulate policies and procedures which will insure uniform financial and educational records and reporting from all community colleges.

10. The State Board must stimulate community colleges to undertake systematic evaluation and institutional self-studies for the purpose of improvement. The State Board is responsible for coordinating these studies into a statewide evaluation in order to see that community college programs achieve satisfactory results. This responsibility should be utilized for the purpose of improving the quality of the community colleges through the encouragement of experimental ventures, research projects, and the like. State leadership need not be aimed at uniformity; excellence may well be achieved through the encouragement of different approaches. But an essential element is the appraisal of results. Participation in such evaluative efforts should be welcomed by

colleges desirous of self-improvement.

In sum, the ultimate responsibility for the quality of higher education in Pennsylvania must be the State Board's. To discharge that responsibility in relation to community colleges will demand unusual leadership in the early years, when these institutions are being fitted into the State's system. The guidelines presented above may help the Board to visualize a bit more clearly than previously its role in this challenging development. They have been offered in this hope.

Role of the professional staff of the State Board in relation to community colleges

1. The professional staff should advise and consult with the Board on all decisions regarding community college education and suggest policy and procedural matters requiring Board attention.

All decisions of the State Board should be based upon the available substantive data. Such data need to be interpreted within the framework in which policy decisions are made in the best interest of higher education in the State. One of the major functions of the professional staff is to collect, present and interpret these data.

But the responsibility of the staff extends far beyond data gathering and interpreting. The professional staff should be sensitive to changing conditions and should bring such changes to the attention of the State Board when appropriate.

2. The professional staff should be responsible for implementing the policies of the Board through executive and administrative action.

The professional staff is the group responsible for the application of policies and procedures determined by the Board. The staff should see that Board actions are properly communicated to all segments of higher education, to appropriate state and federal agencies, as appropriate, and to the general public. Board policies must be translated into standards, rules and regulations for the guidance of college trustees and college administrators. Procedures for implementing the appropriate relationships between the Board and the community colleges which are developing in the Commonwealth should be evolved and perfected by the professional staff.

3. The professional staff must develop research plans and carry out or supervise research studies, information reports, evaluation reports, and other appropriate studies authorized by the Board or considered desirable by the staff.

Members of the professional staff should have a strong research orientation, for in the performance of their basic responsibilities effective communication of factual information relevant to community colleges plays an important role. While in some instances outside resources may be used for special studies, the primary responsibility for planning such work rests with the professional staff.

Types of studies that should be undertaken periodically include the compilation of uniform data on enrollments, programs, finances, facilities, and other relevant aspects of community college operations essential to long-range planning and institutional evaluation.

The development and the implementation of procedures for budget building and the allocation of available state funds, long-range financial planning, collection and analysis of sociological data basic to the planning of appropriate educational programs in the State's community colleges, are also functions of the professional staff.

In a consulative capacity the staff should provide guidance and leadership to community college administrators and faculty. The professional staff should be stimulating program development rather than approving currently offered individual courses. Institutions should be held responsible for educational results; but in achieving such results, the maximum freedom possible should be encouraged.

4. The professional staff must bear the responsibility for coordinating community college education throughout the State.

The professional staff should maintain an intimate contact with each of the community colleges in the State, and periodically it should bring representatives together for the purpose of planning and coordinating efforts of individual institutions. Vigorous interaction can do much to encourage individuals and institutions, just as it can to achieve a statewide pattern of appropriate high quality education in all institutions.

5. The professional staff should assist the individual colleges with long-range planning and with the process and requirements of accreditation. In this connection, it should participate in the evaluation of individual institutions.

The professional staff can do much to encourage the objective analysis of the purposes, programs, and administrative arrangements of individual institutions. This is primarily a consultation relationship in which institutional administrators and state representatives have an opportunity to analyze critically the effectiveness of a particular institution. Well organized and effectively carried out, such experience constitute a valuable vehicle for communication and understanding for all concerned, including the staff members.

6. The professional staff should provide for an annual audit of each community college to insure the appropriate use of state funds.

Such audits should be carried out after the end of each fiscal year by qualified employees of the State Board. Payments to institutions from state funds should be made in accordance with the law and any discrepancies determined by audit should be rectified in the following year's appropriation.

To summarize; the role of state professional staff members is one of a high-level leadership; they serve as advisors both to the lay State Board and to the community college educators of the State. To carry out these advisory functions as well as their administrative and research responsibilities, calls for rare abilities. Our judgement is that a very few individuals well qualified in community college matters, adequately supported with technical and secretarial assistance, would be preferable to a large staff. Finally, salaries for these few professionals must be established at a sufficiently high level to attract people with the abilities demanded by these positions.

The role of the boards of trustees of local community colleges

1. The trustees of each local community college bear the full

responsibility for its administration and management.

Under the legal and regulatory provisions set forth by statute and in the regulations of the Board, the trustees are responsible for the development of the local institution. Its educational quality is the trustees' first concern. The provision of buildings and facilities is the trustees' obligation; they act as a corporate entity, and as such hold title to all physical properties of the college. The trustees are accountable for providing supervision for all the activities of the college.

The local trustees are responsible for seeing that all legal provisions are implemented in the operation of the college. Local regulations and procedures should be consistent with the requirements and limitations promulgated on the state level.

2. The trustees should formulate the purposes and educational policies for the local community college.

Within the broad general policies established by the state authorities, it is the responsibility of the local trustees to formulate -- or to have statements by the educational staff of the local college formulated for their consideration -- statements of the purposes and objectives of the institution to serve as guidelines in the development of the college. Educational policies must also be developed and formulated for the guidance of the trustees themselves in all their actions and as guides to the staff of the college.

3. The trustees have the obligation of establishing instructional programs in response to local needs.

Primarily through the professional staff of the college, the trustees must translate the idea of a community college into a reality which fits the particular community it serves. Community studies of the social, economic, and educational conditions and needs must be inaugurated and carried out to serve as the basis for both short-term and long-term program planning. Of extreme importance to the community college is the development of comprehensiveness based on state needs and local conditions.

Appropriate plans for the assessment of the results attained through the instructional program of the institution should be formulated. Through its professional staff, the trustees should encourage experimentation and research in the effort to improve continuously the academic program.

4. The board of trustees must have the final authority for the distribution of the financial resources available to the institution.

The combination of sources of money for community colleges in Pennsylvania complicates the establishment of clear financial procedures. The principle is clear, however, that the trustees, if they are to be responsible for the management of the institution, must in the final analysis be responsible for the allocation of the funds which are available.

The trustees, therefore, must work with both the state authorities and the local sponsors in securing adequate finances for capital outlay and current operations. One of the trustees' major responsibilities is the formulation of a budget adequate for carrying out the purposes of the local college.

5. The trustees must have the authority to select, appoint, and

govern all employees of the local college.

The selection of a president must be the prerogative of the local trustees. The board of trustees should also fix the salary for the position. This appointee would of course have to meet the general qualifications laid down by the state authorities for such positions. But the individual who is to serve as the trustees' chief administrative officer must be their selection and theirs alone.

The selection and appointment of other employees should be delegated to the president of the college, subject to the confirmation of the trustees. Appropriate specifications for the various positions should be developed, and appropriate personnel policies and regulations should be formulated by the administrative staff for consideration and adoption by the trustees. In this connection, the heritage of freedom which characterizes institutions of higher education in this country must be given full and careful consideration if community colleges are to take their place among the collegiate institutions of the Commonwealth. State guidelines encourage the provisions for freedom; local trustees translate these guidelines into reality. No other responsibility of the local board transcends this in importance.

6. Trustees are obligated to protect the community college from unreasonable external pressures and to safeguard the academic freedom of faculty and students.

If community colleges are to provide educational programs worthy of approval as collegiate offerings, they cannot become the creatures of unreasonable demands from special interest groups in the community or in the State. It is the responsibility of the trustees to make certain that sound educational policies and procedures undergird the institution at all times.

Quality faculty can only be recruited and retained if academic freedom is assured. College students are seeking with increasing persistence learning opportunities of high academic quality in an atmosphere of free inquiry. While to some extent the provision of this atmosphere may for various reasons be more commonly associated with large universities and private colleges, its attainment by the community college is essential.

7. Trustees should cooperate with state authorities in all reasonable ways.

Community college education, being a cooperative venture between state and local groups, depends more than most educational enterprises upon cooperation and mutual understanding. The local lay group should follow the lead of the Board where the development of statewide community college education is involved; in this connection, the trustees should establish and maintain all possible lines of communication and contact with the Board.

Primarily through its own educational staff, the trustees should develop and foster close relationships with the State's professional staff who deal with community college problems and affairs. Efforts of the state group to coordinate and continually to raise the quality of community college education in general and to work with individual institutions for self-improvement, should be welcomed and participated in where appropriate and feasible.

In the search for improvement, the value of regional accreditation should be given full consideration. The criteria of quality embodied in the requirements of the Middle States Association of Colleges and Secondary Schools are proving of significant help to colleges, especially to new community colleges. The more recent emphasis in the accrediting procedure upon institutional improvement and experimentation is doing much to encourage local staffs and trustees. Accreditation is of particular importance to community colleges because a substantial proportion of their students will seek to transfer into other colleges. Therefore, it is our belief that local colleges will display good judgment by working intensively with state authorities in developing the financial support, educational policies and programs that will lead to regional accreditation, entirely voluntary, within a reasonable period of time.

The role of the community college president

The fourth link in the state and local organization of community colleges is the college president. This individual occupies a pivotal position in translating state and local policies into educational activities. His role is crucial to the development of his institution and of substantial importance to the evolution of community colleges in the State.

1. The president is the chief executive officer of the institution. His role is to serve as the link between the board, community groups, the State, and individual laymen, on the one hand, and the faculty and staff of the institution on the other. His leadership is the essential ingredient leading to innovation and change, as well

as to successful day-to-day operation. His role includes responsibility as spokesman for the local board of trustees.

2. The president should bring policy matters to the attention of the trustees, give them his views and counsel, and be responsible for the implementation of all policy decisions. He should be given broad directions by the trustees for the development of the institution in ways which are relevant to the educational needs of the community.

3. It is the president's responsibility to work with the trustees in negotiating financial resources, estimating educational expenditures, and translating them into an annual operating budget and capital construction programs.

4. The president should have full authority for the selection, assignment, and evaluation of all personnel in the college. This responsibility is particularly important in relation to faculty and other professional staff members. In no case should this responsibility be assumed by the board of trustees itself for it lies in the province of the professional educator to perform this function. The president should keep the trustees fully informed regarding all personnel matter and present personnel policy questions to them for decision.

5. It is the president's responsibility for interpreting the college programs to the community at large. He does this through various media of communication to community groups, representatives of local government, students, and parents. This role is extremely important because lay people should not only know what the college is doing but also why it is doing it.

6. The president is the chief liaison officer with the State Board and its professional staff. The presidents' knowledge of the problems of individual colleges should be used by state officials in developing statewide moves for the improvement of community college education.

As community colleges increase in the Commonwealth both in number and in size the presidents of the various colleges should be encouraged to work cooperatively among themselves and in cooperation with the professional staff of the State Board for the general improvement of all such institutions. This group of officers should also establish effective communications and liaison with private junior colleges and with the public and private four-year colleges and universities.

In brief, we have shown the community colleges as a partnership undertaking. The respective roles of the four groups intimately concerned with the development of community colleges in Pennsylvania can be summarized as follows:

The State Board must create the statewide conditions which are conducive to the establishment of the local community colleges so drastically needed by the Commonwealth, and then should stimulate and guide the founding of these institutions. The Board must formulate the rules and regulations that will govern and coordinate them as a part of the State's system of higher education.

The professional staff responsible to the State Board should advise the Board on all community college matters, keep them informed in all ways possible, and implement the policies and regulations established by the Board. With the local community colleges, the professional staff serves both a leadership and a coordinating role.

The boards of trustees of the local community colleges must shoulder the full responsibility for the affairs of the institution, for its educational quality, and for its conformance to all statutory and regulatory provisions of the Commonwealth. In cooperation with the president of the community college, it must develop sound policies for its administration.

The president of the community college is the chief administrative officer, responsible to the trustees for the implementation of all policies. He serves as leader and spokesman and as chief liaison officer with state authorities and with other institutions of education in the State.

B. LOCAL ORGANIZATION

The present statutes and regulatory provisions regarding community colleges are in a state of flux, and a certain amount of confusion exists regarding some of the legal requirements. A number of difficulties have been encountered in developing colleges under Act 484. In one county a section dealing with the responsibilities of the local sponsor was declared unconstitutional; a number of the provisions had been found questionable. Early in the present session of the legislature, steps were taken by the various groups interested in the development of community colleges to formulate amendments that would correct these difficulties.

In general these amendments have been agreed upon but at the time of this writing have not yet been passed.

Because of this situation, the present study has not attempted to analyze these specific difficulties or the suggested rectifications. We have, rather, addressed our efforts toward the identification of long-term needs; our suggestions with respect to legislation will be presented in the concluding part of this major section on organization.

State Board publications setting forth the established standards and guidelines, as mentioned in the Preface to this report, have been revised and reissued. The Dauwalder Report analyzed in some detail the first edition of these Board documents, and included a number of suggestions. However, a careful study of the revised documents indicates that their provisions are clear and in general appear sound for the development of broadly comprehensive community colleges. The difficulties resulting from the organization of the material in the original drafts have been eliminated, so that the present publications should serve well as guides to regions contemplating the establishment of community colleges. Again, our analysis has not been directed at the exact standards and guidelines established by the Board, for time will constitute the better test of these from the standpoint of practicality and soundness; rather, it has been our intention to focus on the broader problems facing the Board in developing an adequate system of community colleges. Changes in the standards or guidelines may have to be made as solutions regarding these problems are achieved, but the nature of these changes can not be determined until the solutions are achieved.

The discussion of local organization will be focused upon the present sponsorship system, a suggested alternative method of organization, and some related matters.

The present sponsorship system.

According to present legislation community colleges can be sponsored by a school district, a municipality, a county, a county board of school directors or any combination of school districts, counties, municipalities or county boards of school directors. Certain features of the legislation have been found unworkable or objectionable by counties or school districts; these have been studied and amendments have been proposed which should take care of at least most of the difficulties. Our assumption is that the legislative provisions which detract from effective and efficient local organization will in due course be changed. There are, however, several long-term problems that have not been dealt with as yet. One of these is the problem of annexation of additional area by an established community college. Closely related to this is the problem of the voluntary withdrawal of an area which finds, with experience, that it wishes to discontinue as a part of the on-going community college. In order for institutions to remain viable, appropriate legal machinery that provides for change in organizational structure is essential. However, these two problems deserve somewhat different approaches. Annexation procedures should be provided that will make it at least as easy for a new area to be added to a college as it is to establish the college at the outset. The deciding factor should be the desire of the majority of the people in the area wishing to annex, as expressed through their leaders or officials, and the willingness of the already existing sponsor, if a single one, or of a majority of the existing sponsors in case there are several, to accept the new area. This problem should yield to a considered approach.

The problem of severance is a bit more difficult to assess. While there should be provision for such a contingency, safeguards are needed for the protection of the rest of the participants in the joint venture; provisions are needed for testing the true desires of a majority of the citizens of the area who wish to withdraw. The State Board should be involved as an interested party in order to protect the rights of the youth of the area as well as to assess the reasonableness of the move. It would seem that, at the least, hearings would need to be conducted -- if not some more formal means -- to ascertain the facts in the particular case and to discover the attitudes of those involved in the proposed move.

Much more stubborn of solution is the relationship between the board of trustees and the sponsor or sponsors. The intent of the present legislation seems clear with respect to the separate responsibilities of trustees and sponsors, but there is difficulty with some of the provisions. Furthermore, one of the amendments set forth as a suggested cure for the present legal difficulties would in our opinion actually create additional problems. A word about this is in order before proceeding with the analysis of positive, long-range suggestions.

The suggested amendment in question proposes that where there is a single local sponsor,

> the Board of Trustees shall submit an annual budget for consideration and approval by the local sponsor. The Board of Trustees shall supervise the expenditure of appropriations made by the local sponsor and shall conduct the business affairs of the community college in accordance with rules, regulations and procedures approved by the local sponsor.

The appropriate budgetary relationship between the local sponsor and the trustees will be discussed in detail in the next paragraph; the proposal that the trustees should be tied to the "rules, regulations and procedures" laid down by the sponsor would create the very arrangements which have caused so much difficulty in other states where the sponsorship method of support is used. Counties and municipalities are not engaged generally in conducting educational enterprises -- their main business is the governance rather than the education of its citizenry. Rules and regulations developed for highway departments, penal institutions, and the like, simply do not fit the purposes of an institution of higher education. They tend to get in the way rather than expedite matters. College administrators faced with the necessity of fitting into county or city departmental routines report that their administration tends to be cumbersome and inefficient and hence more costly. Political considerations tend to intrude into matters which are not political but educational.

The purpose of the amendment, if it is to assure the sponsor that the monies it has contributed have been spent legally and effectively for the purposes for which they were contributed, is laudable; however, in the case of community colleges, expenditures are safeguarded through the provisions of state regulations regarding budgetary procedures on the one hand, and post-expenditure audit on the other. Educational results have to be assessed in other ways than by rules and regulations.

What should be the nature of the relationships between sponsors and trustees? These relationships are in fact almost dictated by the respective roles of the two groups. The local sponsor's role is financial and supportive. A sponsor must know the limits of its financial obligations and responsibilities; it must have assurances that unforeseen legal or financial obligations are not suddenly encountered; it seeks assurance that its financial support is for desirable educational goals reasonably well accomplished. The trustees' responsibility, as set forth previously, was to "shoulder the full responsibility for the affairs of the institution, for its educational quality, and for its conformance to all statutory and regulatory provisions of the Commonwealth." In a certain sense, the relationship is that of two contracting parties: the sponsor is contracting with the trustees to develop and maintain a community college for the benefit of the citizens for whose welfare the sponsors are responsible. Unlike limited contracts, however, the parties to a local community college are not free to withdraw voluntarily at the expiration of a certain period of time -- trustees cannot on their own volition abandon the college, nor can sponsors voluntarily withdraw their financial support. Continuity, an absolutely essential element for an institution of higher education, is thus assured.

The idea of a sponsor-trustees contract originated with the group brought together to consider legislative provisions that would solve the problems being encountered around the State. Our staff had nothing to do with initiating either the idea or the proposal. However, our analysis of the relationships that should exist between sponsor and trustees clearly supports the idea; if it is found to be legally feasible, it may serve the purpose of defining respective responsibilities more clearly than legislation alone has succeeded in doing.

One additional word regarding budgetary responsibilities. It is the clear responsibility of trustees to develop and propose a budget that will enable them to carry on their educational enterprise. Equally clear is the responsibility of the State Board to see that the proposed budget conforms to state standards and guidelines, and to include the amount requested in the total budget for the State's share in financing the community colleges. The responsibility of the sponsoring body or bodies is to accept the lump sum of the request for operating funds if it is in accord with the agreement existing between sponsors and trustees, or reduce the lump sum if it is not. Capital funds would have to be agreed upon in terms of a long-range plan; then specific requests for specific years should of necessity be in accord with those plans and agreements.

The foregoing analysis appears to place the sponsors in a different relationship to the community college than to other county or municipal undertakings. In a way this is true, although other governmental undertakings have a way of becoming relatively permanent also. When a local group agrees to sponsor a community college it is committing a portion of the resources of the area to the purpose of meeting an educational need of the area. The reason for such sponsorship is that the people want the educational opportunities to be provided.

A proposed community college district alternative

In spite of the many attendant problems with the sponsorship system provided in the present legislation, community colleges are being and will continue to be established. Without affecting the existing provisions for sponsored colleges, another method could be introduced which might prove advantageous for some of the areas, especially those where the problems of sponsorship become obstacles to establishment.

Several states have found community college districts, with taxing and bonding power, to be a feasible way of providing local college opportunities. There are some who feel that in the long run this method tends to make community colleges more responsive to the needs of the people.

Our position in advancing the proposal is that it would provide an additional method by which some areas that may not be able to do so under the existing arrangements, could establish community colleges. In some situations the proposal might result in a better, more workable arrangement.

In essence rather than in any detail, such an alternative should provide for the possibility of creating a community college district by a majority vote of the citizens residing in the proposed district.

Such a proposition would be submitted at a special election and upon the presentation by the appropriate governmental agency of a petition with the signatures of not less than five per cent of the eligible voters of the political subdivision involved. If the proposition carries, the State Board through its professional staff should assist in the development of appropriate plans for the establishment of a community college by the newly authorized district. Such a community college district would function educationally under the same general control and supervision of the State Board and its professional staff; the community college district itself would elect its board of trustees and establish its operating budget; the appropriate authorities of the county or counties involved would levy and collect and turn over to the district the specified taxes.

This proposal is made as a long-range suggestion, and it is fully realized that the decision to inaugurate such a move would only be made after long and serious consideration. Furthermore, the improvement of the sponsorship system through amendment and administrative leadership constitutes a more immediate priority. Nonetheless, our opinion is that the possibility of creating such an opportunity for some independent community college districts rates the highest possible priority as a long-range development.

Selection of the board of trustees

A few of the provisions relating to boards of trustees require comment. A fifteen-member board tends to be cumbersome. In the case of the community college, where most of the members live in the district and are generally available, nine members seem quite sufficient. Terms of office should be staggered so that one-third of the membership would change every two years. This would provide a reasonable balance between the advantages of rotation and continuity.

The fundamental question involved in the selection of board members may be put this way: How can the stature, knowledgeability and sense of social responsibility essential to good board membership be combined with the democratic method of election?

Where the college is sponsored by local school districts the presidents of each of the local school boards should come together in convention to elect board members. At least a month before the meeting names of nominees should be submitted to the secretary of the group. Once the college board is in existence, nominations may also be made by members of that board. The resultant list should be screened by the entire college board and perhaps three names for each seat should be placed in nomination at the convention of the school directors. While this procedure places considerable responsibility on individuals primarily concerned with public elementary and secondary education, it is elective and representative of the districts involved.

Where the college is sponsored by the county commissioners of one or more counties, the use of a nominating panel may bring to bear the thoughtful interest of the community. To be broadly representative, the membership of the panel should be comprised of the chief executives of the different kinds or organizations generally found within the county or counties to be served by the college. These organizations might be listed under the following five broad categories: Business and Commerce -- Chamber of Commerce, American Bankers Association, American Manufacturers Association, and other local business groups; Labor -- AFL-CIO, special labor groups, and other labor councils;

Education -- higher institutions in the area, Parent Teacher Association, American Association of University Women, citizens' committee for public education; Professional (not already included) -- American Bar Association, American Medical Association, and similar groups; Other groups concerned with civic improvement -- League of Women Voters, inter-group relations representatives, citizens' planning associations, and still others.

In establishing the panel itself, the sponsors would be able to appoint five members from among the fifteen organizational representatives, one each from the broad categories discussed above -- business and commerce, labor, education, professional, and other groups concerned with civic improvements.

Once established, the panel would select two, perhaps three, candidates for each of the nine board seats. This list would be submitted to the commissioners for appointment to the board of trustees of the college.

An alternative that might well be considered in the future would establish the panel in the manner described above, but would then submit the list of candidates for board membership to the voters in a general, non-partisan election. The important role of the trustees was discussed in preceding parts of this report; in light of their importance, the procedure by which trustees are selected deserves all possible consideration.

Faculty considerations

The importance of academic freedom for community college staff and students has already been alluded to, but it deserves additional comment.

Perhaps no matter is of greater importance than academic freedom for community college faculties. The community college functions in close geographic and psychological proximity to its clientele. It is particularly vulnerable to the biases and ingrained attitudes of parents and citizens in communities. If it is to perform its educational functions of teaching students to evaluate social and economic problems in a critical manner, the faculty must be protected from untoward interference by individuals or groups interested in forcing a particular point of view.

If community colleges are to meet the expectations of students, parents, citizens, and other interested groups, it might be well to consider the adoption of the American Association of University Professors' position on academic freedom, both on the state level and in the individual institution. The position is set forth as follows:

> The teacher is entitled to full freedom in research and in the publication of the results, subject to the adequate performance of his other academic duties; but research for pecuniary return should be based upon an understanding with the authorities of the institution.
>
> The teacher is entitled to freedom in the classroom in discussing his subject, but he should be careful not to introduce into his teaching controversial matter which has no relation to his subject. Limitations of academic freedom because of religious or other aims of the institution should be clearly stated in writing at the time of the appointment.
>
> The college or university teacher is a citizen, a member of a learned profession, and an officer of an educational institution. When he speaks or writes as a citizen, he should be free from institutional censorship or discipline, but his special position in the community imposes special obligations. As a man of learning and an educational officer, he should remember that the public may judge his profession and his institution by his utterances.
>
> Hence he should at all times be accurate, should exercise appropriate restraint, should show respect for the opinions of others, and should make every effort to indicate that he is not an institutional spokesman.

While community colleges differ in certain respects from other institutions of higher education, in order to accomplish their purposes they must achieve recognition as an integral part of higher education. High quality instruction is essential for attaining recognition as collegiate institutions; the quality of an institution's staff is the most important determiner of the quality of instruction. In college teaching, scholarship, concern for students, and interest in teaching and the desire to improve one's teaching are essential. One of the most critical and pressing needs in all colleges today is for scholar-teachers. These are a different kind of scholar from the university researcher; their scholarship is developed and used for teaching purposes rather than research purposes. Because scholar-teachers are needed in all our colleges in great numbers, community colleges will have to compete with their sister institutions for their fair share. But to compete successfully, community colleges will have to develop salary schedules equivalent to those of four-year colleges, just as they will have to provide teaching atmospheres attractive to scholar-teachers. How may this be done?

A reasonable load that would provide time for the study and preparation essential to teaching of a high quality would be one attraction. The encouragement of experimentation and research in connection with one's teaching, is surely another, for many college teachers would be challenged by this type of research opportunity. Finally, recognition for outstanding teaching is the key; faculty rank and salary provisions based on these concepts will attract into the community college scholars who want to teach, who enjoy teaching, and who will be excellent at it.

C. FINANCE

Basic support for operating costs

Provisions for the financial support of community colleges require the State, the local sponsor, and the student to assume one-third each of the operating costs. On the whole, this seems satisfactory. However, there are a number of problems which have already been encountered or which can be foreseen; thus our discussion will be devoted to proposals for anticipating and solving some of these problems.

Ability of the districts to support community colleges

The present legislation limits local support to the amount that can be raised by a 5 mill tax on the market valuation for the county or district. With this legal limit as a guide, there is no county that could not support community college expenditures for the potential enrollments estimated for the next ten years. There is some question, however, as to what constitutes a practical potential for some of the areas that are already heavily obligated for the support of elementary and secondary education and other necessary governmental activities. Perhaps a realistic measure is the ability to raise the funds that are necessary to provide a community college education for the youth of the area by levying a tax of 3 mills or less on the area's assessed valuation. On this basis, some sixteen counties would not be able to raise a sufficient amount of tax money for community college pruposes.*

*Appendix G contains a discussion of the procedure by which the ability of the counties to support community colleges is estimated.

On the whole the implications of this analysis are very encouraging. It is to be expected, however, that in some areas the residents will be justifiably reluctant to go beyond a tax rate of 3 mills. Consequently in the long run the State of Pennsylvania will have to give consideration to the necessity of developing an equalization basis for aiding counties with low economic ability. The formulation of an equalization plan is complex and complicated and has not been undertaken in the present study. But it would be well for the State Board to give attention to this possibility at some time in the future.

Student tuition

At the present time the local tuition rates for students in established community colleges are between $270 and $330 per student per year. When compared to tuition rates of private colleges, these would appear to be quite reasonable; when compared to the tuition rates in community colleges throughout the country, however, they seem quite high.

It is our feeling that there is danger that community college tuition rates will mount to the point where they will constitute a financial barrier for a substantial number of students. Therefore we recommend that the State Board initiate discussions regarding the advisability of diminishing the student's proportion of operating costs and increasing the proportion to be raised through taxation by the State and the sponsors. Some time in the near future legislation might be introduced that would gradually reduce the present student proportion of 33% to 20%, perhaps by successive reductions over a five-year period from the present 33% to 30%, 27½%, 25%, 22½% and 20%. As this is done, the State and the local sponsor would increase their percentages to make up for the drop in the student proportion. The final formula would be 20% from student tuition, 40% from the State, and 40% from the local sponsor.

Further, we suggest that community colleges be restricted with regard to the amount of fees they may charge students over the above standard tuition. It might be wise, for instance, to limit these to a $10 registration fee and a $10 student activity fee each semester. This action would guard against the always present temptation to increase fees to supplement tuition and taxation support, which never seem to be quite enough to enable college authorities to do everything they would like to do.

A closely related matter, and a very important one, concerns state scholarships. These may provide the assistance needed for large numbers of community college students. As a matter of fact, if the state scholarship program that finally evolves out of the present discussions and proposals is substantial in the amount provided and adequate in the number included, it might take care of those students who are unable to meet the normal tuition requirements for some time to come. It is, therefore, very important that the State Board work for the inclusion of community college students in whatever scholarship provisions are finally passed. It is, of course, also essential that community college students be included in the student loan provisions that are developed.

Non-resident tuition fees

Currently, citizens of Pennsylvania who reside in an area that does not have a community college, but who wish to attend one, who are eligible and who do so, are required to pay two-thirds of the annual per student operating cost of the particular college rather than the one-third paid by students who are residents of the college district. This seems unfair and unjust. Rather than shift this burden to the student or his family, a charge-back method should be developed which would enable any Pennsylvania resident to attend any community college within the State by paying tuition equal to the usual one-third of the operating cost. The local district's share of one-third should be charged back to the county or school district in which the student is a bona fide resident. Appropriate legislation needs to be formulated whereby this charge can be automatically assessed through State and county channels. Not only will changes have to be made in the community college law, but other laws pertaining to the operation of municipalities will have to be carefully studied at the same time. The charge-back method should also be applied to the local sponsor's share of capital outlay.

Capital Outlay

State and local shares

The provision of capital outlay is a critical factor in the development of community colleges in the State. Since the initial outlay for buildings and equipment is always disproportionate to the number of students being served during the first few years of the life of the college, most communities in Pennsylvania would be unable to assume full responsibility for the construction of community college buildings. Inasmuch as individuals constitute a state resource whose value is greatly enhanced by educational and occupational competence, it is clearly an advantage as well as a responsibility of the State to participate in underwriting its share of the cost of the education which community colleges will provide. It is our opinion, therefore, that the present legislation, which provides that the State assume half of all capital costs and the local community assume the other half, is sound.

Method of funding capital outlay

One of the very knotty problems faced by all of the newly created community colleges in Pennsylvania has to do with funding for building construction. The potential methods of raising funds differ greatly according to the type of sponsorship, as set forth in the legislation. County sponsors have a greater variety of methods open to them than do multiple school district sponsors; therefore the solution to the problem of financing long-term capital needs is frequently simpler for counties.

County sponsors have four potential sources or methods of financing capital costs: first, the levying of a tax sufficient to finance a "pay-as-you-go" program; second, for counties that are within their legal debt limit, the issuance of general obligation bonds; third, the creation of an authority under the Municipality Authorities Act of 1945 for the issuance of bonds; and fourth, the borrowing of money from other-than-government lending agencies. Of these methods, the "pay-as-you-go" program is relatively impractical for all but a very few counties with unusual financial resources at hand. The alternative of creating an authority under the provisions of the Municipal Authorities Act of 1945 is made possible through legislation now pending but which hopefully will be available soon. County sponsors would thus seem to have adequate methods of financing, if their financial resources are sufficient.

The community college with multiple school districts as sponsors seems to be confronted with greater difficulties. Unless the pending legislation authorizing community colleges to participate in the Municipality Authorities Act is passed and is found applicable to colleges sponsored by school districts, these community colleges have only the method of borrowing from private lending sources. This is one of the major reasons why Pennsylvania, if it wants to have uniformly strong community colleges, should provide the means for creating fiscally independent community colleges with bonding and taxing powers; for certain areas there probably is no other way of creating strong institutions with sound educational and financial potentials. The present cooperative school district method is quite cumbersome and should be superseded as soon as practical by the other arrangements.

In the meantime, some way should be devised for assisting these districts with capital financing. One such suggestion is outlined below.

State reimbursement procedures

Operating costs on a current basis

While the intent of the community college law of 1963 is clearly to provide for state reimbursement of community college operating expenditures on a current basis, under the present interpretation the State is not reimbursing its one community college in this manner. Badly needed legislation to correct this situation is now pending. If it should not be passed, however, every appropriate means should be used to secure a change in the interpretation presently being followed.

Funds for capital outlay

One procedure that would help a great deal in meeting the needs of the community colleges for capital outlay would be for the State of Pennsylvania to create a Community College Capital Outlay Fund, anticipating to the degree possible the demands of the next few years. Table 6 gives two estimates of the needs for capital outlay: one, the "minimum" number of colleges that may be established; and the other, the number that is needed and quite "possible" according to our analysis of potentials in the various regions and counties. If the Commonwealth should create such a Fund, it should be administered under the jurisdiction of the State Board in order to disburse the State's share for capital outlay to the community college at the time construction bids are let out. This would help the local colleges substan-

Table 6

ESTIMATES OF AMOUNTS NEEDED YEARLY FOR STATE REIMBURSEMENT
ON A CASH BASIS FOR COMMUNITY COLLEGE CAPITAL OUTLAY
1965-66 THROUGH 1968-69.

	Estimates	
Year	Minimal	Possible
1965-1966	$ 2,598,600	$ 2,648,600
1966-1967	9,705,000	11,920,000
1967-1968	17,682,500	26,287,000
1968-1969	23,165,000	30,610,000

Source: calculations as explained in Appendix J.

tially in meeting the capital outlay problems which they face almost immediately after they are established. A feature similar to this proposal has operated in the New York plan to give local sponsors capital funds in their early years, thus enabling several colleges to undertake campus developments which would have been impossible without this assistance.

Once the community colleges have found a method of financing capital outlay, they must have freedom and flexibility in planning. This is true of administrative and curricular matters; it pertains equally to financing campus development. Building needs, if local institutions are to exhibit initiative in meeting community needs, will vary significantly. The Fund suggested above would enable the State Board to encourage this highly prized local initiative.

Until an arrangement such as this could be implemented, it is essential that the Commonwealth include in its budget an amount adequate for reimbursing community college sponsors for the State's share of the cost of amortizing capital outlay. If this method is followed, Table 7 gives our estimate

Table 7

ESTIMATES OF STATE REIMBURSEMENTS TO COMMUNITY COLLEGES
FOR CAPITAL OUTLAY 1965-66 THROUGH 1968-69,
BASED ON AMORTIZATION PLAN

	Estimates	
Year	Minimal	Possible
1965-1966	$ 400,000	$ 450,000
1966-1967	855,000	1,320,000
1967-1968	1,632,500	2,307,000
1968-1969	2,615,000	3,490,000

Source: calculations as explained in Appendix I.

of the minimum and possible amounts which might be involved for the next few years. It is of course the State Board's responsibility to see that sufficient funds are appropriated by the State for this purpose.

Board procedures for reviewing community college budgets

One of the primary responsibilities of the State Board is to establish procedures for developing, proposing, and working for the acceptance of the state budget sufficient to cover the State's commitment to community colleges. In implementing this, the question arises as to how the Board should review budget requests from individual community colleges. With respect to operating costs, the policy of the Commonwealth is given in the legislative provisions which authorize community colleges to spend up to a specified amount per student per year. In this connection, the State Board would need to review budget requests to see that the proposed expenditures are within the legal limits. If they are, they would then be included in the Board's combined budget of community college needs.

With respect to capital outlay expenditures, the Board's role is a dual one. As community colleges prepare campus development plans, State Board approval is required before such plans become final. Approval of these plans would constitute commitment by the Commonwealth to meet its obligation of one-half of the capital costs. Thereafter, it is the Board's responsibility to see that these budget requests are in accordance with the approved plans. Moreover, it has the obligation to secure the funds for state reimbursement. Thus the Board operates to protect the State's interest on the one hand, and to ensure the community college's freedom of operation within specified limits on the other.

Other financial issues

Another budgetary responsibility involves the annual audit of expenditures which the legislation mandates. In this regard, two principles are important. First, the audit should be a "post-expenditure" one so that it does not impose an undue restriction on day-to-day administration of the local college by its constituted, responsible officials. Second, procedures must be agreed upon with the Auditor General's office so that the post-audit does not delay the current year's reimbursement discussed above. Inasmuch as community colleges are permanent, partially state-supported institutions, there is no problem in adjusting subsequent reimbursements if audits should reveal the need for adjustments.

There is a provision in the presently pending legislation for reimbursing community colleges for summer sessions, a third tri-mester, or a fourth quarter, up to a limit of $350 per student in attendance. The provision for reimbursement for such additional sessions is essential, and the proposal for summer sessions and fourth quarters seems sound. As a long-range policy, however, the State Board should give serious consideration to providing greater financial incentive to community colleges to undertake full-year operations; the third tri-mester should be reimbursed on the same basis as the first two tri-mesters, since it will, if colleges follow usual year-round operation procedures, be equivalent to them.

One other matter relating to finance concerns the definition of a full-time student. The present Board regulations follow the definition commonly used -- viz., a student who is enrolled for 12 or more semester hours of credit. The pending legislation, however, would stipulate the number of hours as 15. Certain aspects of this matter deserve comment.

For academic credits, students will spend not only the designated number of hours in class but at least twice this number of hours in individual study. Also the additional hours needed for laboratory or field work will add to the students' time load. It is commonly assumed therefore, that a 15 credit hour load will usually require a minimum work load of 45 hours a week; most students put in a good deal more. There are certain educational implications relating to credit hour loads that are discussed in Part D, "Legislation." Here we need to point out one or two financial implications.

Under the present definition, every student who enrolls for 12 or more hours is counted as one full-time student. The great majority of students will take 14, 15 or 16 credit hours, depending upon schedules, program requirements, and the like. Quite a few students will take 17 or 18 hours, particularly those in engineering, technical, and semi-professional programs. A few students will take lighter loads for reasons of health, part-time work, need for more study time on certain courses, or because of academic weaknesses, etc. Usually lighter-than-average loads will be carefully worked out between student and adviser.

The 12 semester credit hour definition thereby includes practically all students for whom college attendance is the main undertaking. Students taking less than 12 credits tend to be part-time students with outside-of-college obligations as their main activity. Under this system, colleges receive the same reimbursement from the State for the student who enrolls for 18 hours as they do for the one who enrolls for 12 hours. The average credit hour load per student will be slightly more than 15 credit hours.

With a 15 hour provision, colleges will be penalized for every student who takes less than 15, and will receive no extra financing for the student who takes more than 15. Furthermore, in calculating reimbursements for part-time students, using 15 as the divisor will penalize the colleges that are providing, as they should, counseling and other services for part-time as for full-time enrollees.

We are convinced, therefore, that the shift from 12 to 15 hours will weaken rather than strengthen the work of the community colleges, and will not in the long run make very much difference in the cost to the State. If the 15 hour definition is legislated, then our suggestion would be that the method of calculating reimbursements be changed to some such formula as the total credit hours taught by the college (both part-time and full-time) divided by 15. This method would reimburse the college for all of its teaching, rather than penalize it for students with light loads and not credit it for students with more than the average credit hours.

D. LEGISLATION

Many of the recommendations in Section IV which call for legislative action are based on the discussions of the problems that are examined in the various parts of this report. For instance, the policy of making community college opportunities universally available to the people of Pennsylvania -- as suggested in earlier parts of this report -- will necessitate several pieces of legislation. Thus recommendations pertaining to this matter are set forth and briefly discussed under "Legislation" in Section IV. Again, if the financial relationships of sponsors and local boards of trustees are to be soundly developed certain legislative changes are imperative. These changes are consequently presented as legislative recommendations in Section IV. A good many financial matters call for legislative action; for all of these, then, appropriate recommendations are made under "Legislation" in Section IV.

In the present section we will not deal with items that have been treated elsewhere in the report, but will confine our discussion to two topics. First, we will present those few legislative matters that need consideration and which have not been analyzed in some other part of the report. Although there are not many of these, we feel that they are important. Second, it seems appropriate at this point to take a brief look at the State Board's overall major responsibility for state legislation.

Additional legislative items

One of the findings that emerged from our detailed analysis of certain regions in Pennsylvania was that there are some parts of the State that probably could not be served by a community college within commuting distance of all its students for quite some time to come. The possibility of dormitory facilities for a modest number of students is discussed with respect to two or three community colleges in these regions. If by such means students can be served who otherwise would not find it possible to attend college, then the Board might well encourage a few institutions to think in these terms. A recommendation to that effect will be found in Section IV.

Of quite a different nature is the problem of providing community college staff members with the opportunity to join an appropriate retirement system. There seems to be every reason for making these members eligible to join whichever one of the two major retirement systems in Pennsylvania suits their needs most adequately. Such a recommendation is made in Section IV.

Yet another and quite distinct problem concerns the transformation of community colleges into four-year colleges under the pressure of increasing demands for higher education. At first blush this possibility might seem to be perfectly logical. However, there are two aspects of the problem which lead us to recommend that such a course of action not be encouraged; in fact, we suggest that legislation be enacted which would make such action possible. Two-year colleges are created to serve a unique combination of purposes. When a two-year college becomes a four-year institution, it quite properly takes on new functions and sloughs off some of the purposes previously served. This leaves the community without these educational services.

The second reason is the fact that the establishment of a four-year public college should be based on the careful assessment of all relevant factors: regional needs, other institutions in the area, potential enrollments, probable programs, location, etc. These matters are quite different for the four-year college and the two-year institution. Therefore, any existing two-year college should be continued and the question of the establishment of the four-year college dealt with as a separate problem.

The State Board and legislation

In our discussion of the roles of the Board we stressed the importance of this body becoming recognized as the group which speaks for higher education, including community colleges, at the state level. Such recognition does not come overnight. Yet it is essential that there be such a voice, and under the present circumstances that voice needs to be a powerful one. The first ingredient is the Board's own view of its mission.

The Board's leadership with respect to community colleges may be more easily assumed than its leadership in some other areas of higher education; consequently, the coordination of these two-year institutions and the integration of them into the whole system of higher education may constitute a challenging area of leadership for the Board.

The Board must speak with authority and conviction regarding statewide policies for community colleges, and this includes suggestions for state legislation that is needed for their development and improvement. The Board needs the help of experts in the areas of legislation and finance in higher education, for the problems are significantly different from those in elementary, secondary, and vocational education.

The availability of personnel will be important, but the role of the Board goes beyond the establishment of policy and the drafting of proposed legislation. The lay board must be the spokesman for higher education with government officials and legislators. The professional educators will of course be called upon to meet with legislators and officials from other departments and bureaus; intercommunication at all levels is essential. But when policy questions in the domain of higher education are under discussion, as they are with the governor and his executive staff and with the legislature and its committees and staffs, the voice of the Board should be heard.

We feel that the Board has begun to assume these responsibilities in a vigorous and effective way. The purpose of this discussion is to underline the importance of the Board's exercising this role with respect to community colleges. Without the Board's militant backing, these newborn institutions might well suffer from malnutrition. Community colleges, like humans, need a period in which to develop and grow. Some part of the responsibility for providing this opportunity falls on the shoulders of the governor and the legislature, for the community colleges owe their existence in part to them. But the major responsibility falls to the Board, for the Board has a more direct relationship to community colleges than the legislature and the governor with their general responsibility for all affairs of the Commonwealth.

E. PROGRAMS, FACULTY AND FACILITIES

A general investigation such as the present study cannot delve deeply into the matters of instructional and guidance programs, the domain of the faculty, or the special problems of facilities. There are, however, some general principles that need to be recognized, and out of which come a few suggestions for the State Board's attention.

Instructional programs and facilities

In Section I we discussed the community college idea. In that analysis we placed great stress on the comprehensiveness of the community college if it is to serve the broad needs of the geographic community.

If this concept is accepted, individual institutions have to work continuously at the problem of defining community needs and devising programs to meet those needs. General studies of the community, analyses of occupational employment opportunities, recreational studies, advisory committee deliberations, the canvass of employer associations, the cooperation of labor groups, liaison with various cultural groups, follow-up studies of graduates, analyses of student characteristics and opinions -- all these and still other activities will be engaged in by local college staffs. Statewide analyses help, but community and regional differences call for special studies.

There are, however, a few general problems which need special attention. For instance, community colleges commonly need help and encouragement to experiment with new programs.* State Board encouragement early in the development of community colleges in Pennsylvania could help establish patterns of cooperative experimentation. Through the professional staff assistance could be given to individual colleges which might mean the difference between prosaic programs and ingenious innovations. Research efforts need to accompany as many of these ventures as possible, and the Board might well lend assistance to individual colleges in their search for funds for research on instructional problems. State leadership might discover and cultivate philanthropic foundations that are interested or might become interested in underwriting ventures in two-year college instruction. The responsibility for securing and disbursing federal funds for different kinds of undertakings also falls to the state authorities.

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*For a recent monograph addressed specifically to this problem, see B. Lamar Johnson's Islands of Innovation, Junior College Leadership Program, University of California at Los Angeles, 1964.

The preparation for semi-professional and technical careers discussed at length in Section I of this report, requires both comprehensive programs and facilities. The importance of this aspect of community college instruction has been emphasized throughout. Appropriate career programs should constitute a substantial part of every community college's instructional offerings. Our hope would be that something like half of the community college students would be enrolled in such programs. State Board encouragement and professional staff expertness and interest in semi-professional education will have to be coupled with leadership and promotional activity in every community college. Appropriate facilities -- laboratory, shop, classrooms -- and equipment are essential and must be provided for whatever programs are undertaken.

Certain instructional areas have been neglected so far in the legislative provisions regarding community colleges in Pennsylvania. It is essential that these institutions, if they are to be colleges and an integral part of higher education, develop rich programs in the arts and the humanities. Facilities for music, art, drama, and the like are needed just as much as electronics laboratories, nursing classrooms, and mathematics classrooms, important as all of these are.

Health is an increasingly important concern in this modern world; health and physical education are for college students just as important as the areas of science, history, and language. Facilities for instruction in these fields are essential; they must be provided, perhaps most importantly at the colleges in the large metropolitan areas. Physical education activities and intramural athletics should concentrate on individualized and small group recreational activities that all of us need to engage in as adults.

The place of intercollegiate athletics comes to mind when physical education facilities are discussed. Large scale competive athletic events have no place in community college education. In this regard the example of the well controlled positive use of intercollegiate sports by small colleges may offer the solution for community colleges. Athletic competition, both intramural and intercollegiate, can be properly controlled and educationally utilized. The Board should adopt the safeguards set forth in Section IV.

We are entering a new era in educational technology; college learning and college teaching must of necessity be in the forefront of experimentation with programmed learning, use of new media, development of new teaching techniques, refinement of mass communication techniques for educational purposes, automated learning materials, computer-based instructional programs, and the like. A variety of classrooms, variously equipped, are needed, including at least one very large auditorium-type classroom with the latest available mass media communications systems.

The library --an educational materials center

It has often been said that a college consists of a faculty, students, and library. It is indeed true that the library with its store of information is essential to the proper functioning of a collegiate institution. Without such educational material, teachers would find it difficult to teach and students would find it virtually impossible to learn. This third leg of the stool of education is as important as qualified personnel, classrooms, laboratories, and scientific equipment.

Libraries have, in the past, consisted of collections of printed material, books and periodicals for the most part, and limited types and amounts of audio and visual materials. While there are variations among institutions, the library should contain documents, historical material, and perhaps museum and art objects of importance to the community being served.

In recent years there have been vast changes in the materials and equipment used for teaching and learning; most of these have grown out of the startling advances made in the technology of communications necessitated by even more rapid scientific developments. These changes have had a marked impact upon the concept of the library as seen by professional educators. Stress had been placed upon ease of use of materials by students, an increase in the number of services rendered by the professional library staff, the increase in the variety of materials housed and available for use, and the development of new concepts of physical plants and planning to encourage a viable library service.

In addition to the traditional types of materials stored and made available in the educational materials center, there is now much stress on the planning and use of electronic equipment. Such equipment is essential for the storage and retrieval of materials. Knowledge is proliferating at such a rapid rate that it has been necessary to find ways by which students can find appropriate resources in a minimum of time. With a modern retrieval system, it is possible to find a book or periodical through current stack lists or catalogues kept up-to-date by data processing equipment.

The automation of the educational materials center has developed rapidly with the introduction of audio-laboratories used heavily in English, music, foreign languages, drama, literature, stenography and others fields. This equipment can be used to meet individual needs through recorded lectures and discussions in all subject-matter areas. Rapid progress is also being made in programmed learning which utilizes teaching machines, microfilm readers, slides and motion pictures.

Closed circuit television also performs an essential role in library work as well as in the classroom. Information, understanding, and concepts can be acquired through live broadcasts, films and video tape, which can be used repetitively by students as they attempt to master the requirements of their courses. The use of these and other technological innovations involves a new concept of the provision and utilization of educational materials.

The professional staff of the educational materials center now includes individuals with professional training in library science, graphics, technical electronics, art and television, in addition to the necessary administrative personnel. This group serves as a professional team that can create, store and make accessible modern educational materials to students and faculty alike.

The requirements of relatively new technical equipment have far-reaching implications for the construction of educational materials centers. Such buildings should have spaces for large groups, small seminars and individual study. In addition, these buildings should have adequate storage and circulation areas, a materials production area, a maintenance and service area, and a graphic arts center for the development of teaching materials. Such modern buildings should have open stacks and spaces for browsing, individual study, and informal reading.

Guidance activities and admissions policies

The comprehensiveness of community colleges must be based on appropriate admissions policies and be accompanied by adequate guidance provisions.

The admissions policy of any institution flows out of its purposes. This was discussed briefly in Section I, where it was shown that the community college's broad purposes meant the admission of students with varying abilities and interests. Although seriousness of purpose and substantial intellectual effort should mark the attitude and work habits of community college students as those of other college students, the emphasis is not on intellectual eliteness as it is quite appropriately in other institutions. Consequently, even if community colleges in Pennsylvania cannot at first make room for all of the high school graduates who apply, they cannot resort to the typical pattern of admitting only the candidates with the highest high school grades and the top scholastic aptitude test results. That answer may be appropriate for the transfer programs in the arts and sciences and engineering and other pre-professional offerings; but for the electronics, nursing, secretarial, and accounting programs, for example, such admission requirements would bar many students for whom these programs would be academically appropriate and occupationally well-suited. Furthermore, one of the purposes of the community college is to provide a second chance for the youngster who may not have made the most of his academic ability while in secondary school; standarized admission scores will not give him that opportunity -- only individualized consideration will determine whether he should be admitted. The late developer does not show up in high school grades and test scores; he has to be discovered and encouraged.

All of these considerations mean that admissions policies have to be geared to programs and to individuals, not to standards and test scores alone. And if individuals with wide differences are admitted, they need to be counseled.

Very briefly, the case for sufficient guidance services in community colleges may be put this way: to spend literally thousands of dollars in providing educational opportunities, and then not to spend the few hundreds of dollars that would enable individuals to utilize these opportunities properly, simply does not make sense. In many respects the need for guidance services is greater in community colleges than in other colleges and universities. The very policies inherent in the community college idea -- accessibility (academic as well as geographic and economic), comprehensiveness, community centeredness, dedication to providing lifelong learning opportunities, adaptability -- make adequate guidance services imperative. Accessibility means that many students may come for somewhat unrealistic reasons; they need help in clarifying their purposes and in making appropriate plans. Comprehensiveness means a broad offering to choose from; counseling becomes imperative. Community centeredness and the provision of lifelong learning opportunities mean that community colleges attract into their programs individuals with all kinds of needs -- and many times the need for guidance is the most critical one, certainly to start with. And finally, adaptableness means that the institution itself needs to study its own role in every way possible; guidance officials can make substantial contributions to the continuing institutional self-study that every community college should undertake.

Faculty

In the subsection on local organization, the importance of academic freedom was stressed, and the relationship of faculty scholarship to academic freedom and faculty rank was analyzed. Two or three additional comments regarding faculty matters are in order here.

Throughout its existence, the two year college has been promoted as an institution in which superior teaching was the sine qua non of faculty excellence. Today more than ever, research and experimentation on college teaching problems are needed; here are areas where newly established community colleges can exert leadership. Faculties can be chosen with excellence of teaching as the primary criterion. This means a search for college teachers, both experienced ones and those ready to begin their college teaching careers, who give promise of being scholar-teachers rather than scholar-researchers. The scholarship needed at the lower-division level is as great as that needed at any level; but it is a broad scholarship rather than a highly specialized one. Coupled with this breadth of learning there needs to be a high regard for teaching, as a challenge and as a source of satisfaction.

Among such faculty members a spirit of experimental venturesomeness could be created that would lead to institutional improvement through the innovation of new teaching procedures and research on their effectiveness, through the production and/or utilization of new teaching materials, through the careful study of students and their problems, interests, and goals.

This type of scholarship and research, if desired, has to be rewarded. Salary schedules and criteria for promotion must recognize excellence in teaching, adeptness in student counseling, dedicated service to the institution, research on educational problems, production of teaching materials, and the like. Faculty leave policies need to be studied in terms of their contribution to faculty growth in these teaching matters, rather than in terms of the typical research activities of the university professor.

While the responsibility for faculty policies lodges with the local institutions, the Board through its professional staff can influence developments along these lines. Curriculum task forces to work on program development, cooperative projects for the production of teaching materials, in-service workshops, and faculty conferences -- through such activities as these state leadership can be exerted for the purpose of improving instruction.

SECTION IV

RECOMMENDATIONS

A. THE STATE BOARD'S ROLE IN COMMUNITY COLLEGE DEVELOPMENT

An examination of the community college movement as it has developed in the United States results in a strong indication that this type of institution would serve Pennsylvania in important ways. An extensive canvass of Pennsylvania's economic and social needs, population trends, and occupational needs has revealed serious problems in the Commonwealth with which community colleges could help. Furthermore, indications are that there is already a serious shortage of opportunities for higher education in the State, and that these shortages will mount rather than diminish. Our conclusion in view of these conditions is that community colleges are badly needed in Pennsylvania, and the following recommendations are made in the belief that they will help the State in the development of a sound and extensive system of two-year community colleges.

Policy making

Recommendation No. 1

The State Board should be the state agency chiefly responsible for initiating state policy regarding community colleges in Pennsylvania.

The assumption that policy making is the fundamental role of the Board is basic to most of the recommendations that follow. As discussed in the body of this report, this is the key to the development of a coordinated system of higher education.

It is important to observe in this connection that the all-important roles of the governor and legislature are not overlooked. The governor must ultimately decide what he, as chief executive of the State, believes is sound to follow as his policies, and what is appropriate to recommend to the legislature for enactment. The legislature in turn is responsible for the passage of proposed policy into law.

The governor and the legislature, however, have under their consideration the State's entire range of needs. The Board, on the other hand, is concerned only about educational policy, and should be viewed by governor and legislature and other state offices as the chief architect of educational proposals.

Recommendation No. 2

It is recommended that community colleges, as an integral part of higher education, be under the control of the State Board so far as state policy is concerned.

In a number of states in recent years, separate boards of control of community colleges have been created; it is our considered judgment that in Pennsylvania the infant community colleges will gain strength and support by being responsible to the Board along with the other institutions of higher education in the State.

Recommendation No. 3

It is recommended that the announced policy of the governor, the legislature, and the State Board of Education that the development of community colleges is to be an important element in the State's plan for higher education be implemented in every way possible.

Difficulties encountered in the present legislation need to be cleared up as quickly as possible, for they have already caused serious delays in several counties or areas in the development and submission of community college plans. In an even greater number of situations, committees appointed to develop community college studies or informal groups exploring the community college idea have been discouraged from pursuing their plans because of the legislative confusion. Although a wide array of people have rightly been concerned about the solution to the legislative impasse, the State Board of Education bears the responsibility for spearheading the movement to secure the passage of sound amendments.

Other implications flow from this policy, but they are treated in detail in the specific recommendations which follow and so need not be alluded to here. The general connotation is that the Board must take advantage of every opportunity to reinforce its major policy.

Recommendation No. 4

It is recommended that the State Board adopt as its policy to work toward the end that every high school graduate in Pennsylvania shall have the opportunity to attend community college if he has the interest and shows the ability to succeed in some program of instruction.

This should be frankly recognized as a long-term goal that will require many years and an incalculable amount of work and devotion before it is accomplished. Its very pronouncement, however, will put Pennsylvania squarely in the stream of progress in higher education in the United States. The adopting of this policy should be widely disseminated so that school officials and potential community college sponsors throughout the State will be appraised of the Board's conviction and intention.

One of the first opportunities to give notice to the citizens of the Commonwealth of the firm intention to carry out this policy will be the affirmation from the Board that it intends to bend every effort toward establishing community colleges in those areas shown by this Study to be high priorities in need, feasibility, and community interest. Such an announcement may well constitute just the act that is needed to spur community college committees in these situations to complete and submit applications. Furthermore, the announcement of this policy and the example offered by these areas may also arouse to action some of the communities with high priority needs but in which community interest has not developed to a high point.

Recommendation No. 5

It is recommended that the State Board reemphasize its intention to encourage the local community college trustees and officials to assume full responsibility for the character and quality of their institutions, and its further intention to protect the independence and integrity of these institutions of higher education.

In part the genius of the community college is the blending of the heritage of higher education and the needs and desires of the community being served. While state control is placed with the Board, part of its delicate function is to exercise its control in such a way as to strengthen the independence of the individual institutions. The entire concept of balancing state and local support and control, is at stake.

Recommendation No. 6

It is recommended that the State Board through its professional staff organize a series of work conferences for community college trustees.

The concept and operation of the community college need to be studied by newly created boards of trustees for these Pennsylvania institutions. One of the leadership functions of the state staff responsible for community colleges is to bring trustees together so that they may learn together and from each other as they move into their responsibilities. This may well be one of the most important tasks for the Board and its professional staff.

Recommendation No. 7

It is recommended that the State Board initiate action through its professional staff to stimulate individual community colleges to undertake continuous self-evaluation studies, and to coordinate these into a pattern of evaluation for the community colleges of the Commonwealth.

Pennsylvania has a unique opportunity as it begins the development of a state-wide system of community colleges to study and report its experiences in this undertaking. It could, through carefully planned evaluation studies, contribute substantially to our knowledge regarding the functioning of these two-year institutions.

Policy implementation

Recommendation No. 8

It is recommended that the State Board regard as its responsibility the implementation of all state policies regarding community colleges adopted by the governor, enacted by the legislature, or formulated by the State

Board itself.

The responsibility of implementing policies parallels that of initiating them. While a great deal of the actions necessary to implement policies will be carried out by the professional staff, the responsibility clearly lodges with the Board to make sure that appropriate actions are initiated.

Recommendation No. 9

It is recommended that the State Board give serious consideration to the problem of communication with the governor, the legislature, community college trustees and officials and the public.

Official letters and documents and news releases are of course essential ingredients in the communications process, but they need to be buttressed with many other activities. The State Board and the State Council have been under great pressure regarding a plethora of higher education problems since the reorganization into a single board and the passage of the Community College Act and the Vocational Education Act of 1963. Informal communications procedures with diverse groups of college administrators, school personnel, legislative committees, and executive offices of the State are not developed quickly. However, it is our observation that these processes need attention if the Board is to serve as the spokesman at the state level and develop and utilize a wide array of personal, group, and institutional commitment to the community college idea.

Recommendation No. 10

It is recommended that the State Board assume the responsibility for developing and proposing to the Governor and the legislature an annual budget for the State's share of community college operating expenses and capital outlay.

Budget estimates will need to be collected from the individual colleges, reviewed and collated into a single state budget proposal. Operating expenses will be pretty largely a matter of formula within the legislative and regulatory provisions governing fiscal matters. Capital outlay expenditures will emerge from long-range development plans which will need state approval. Thus the annual state budget for community colleges will be governed by decisions regarding the establishment of colleges and the approval of campus development plans.

It is clear that the Board, if it is to stimulate as well as approve the establishment of community colleges, must take the responsibility for seeing that realistic and adequate budget provisions are secured.

Recommendation No. 11

It is recommended that the State Board initiate action to have prepared for its consideration and adoption, state plans as required by the federal government for the granting and disbursement of federal funds for higher education.

There are many existing federal assistance programs for higher education which provide monies for community colleges. There will be even more in the future. These funds can be utilized more economically if they are channelled through the Board rather than having them become the focus of institutional competition because of the lack of state level coordination. The Board, with its overall view of higher education in the State, is the only body qualified to carry out this responsibility.

Recommendation No. 12

It is recommended that the State Board should have the responsibility for selecting and employing, under the provisions of the State's civil service regulations, the professional staff serving the Board.

In order to secure and retain qualified individuals, state employment conditions have to be attractive. Except for appointees at the deputy level, employees should be under civil service, no political considerations should be involved, and only professional competence should be considered.

After appointment, all professional and technical personnel should be responsible to the Board and under the administrative direction of the Board's chief executive.

Coordinating functions

Recommendation No. 13

It is recommended that it shall be one of the chief functions of the State Board to coordinate the Commonwealth's entire system of higher education, including community colleges.

Not only the success of the community colleges but of the entire State's system depends upon proper coordination. It is because of this basic principle that our recommendation is for the community colleges to be controlled by the single board responsible for all of higher education. The relationships analyzed in Section I of this Report should be given serious study by the Board as it considers the problem of coordination.

Recommendation No. 14

It is recommended that the State Board continue to press vigorously for the formulation by its professional staff of proposed guidelines regarding the relationship of community colleges to vocational education.

Our discussion in Section I laid considerable stress on the necessity for the enunciation of clear state policies. It would be wise, in our opinion, for the Board to request the Department of Public Instruction personnel to continue their efforts to formulate guidelines for the Board's consideration.

Recommendation No. 15

It is recommended that the State Board request representatives of the Vocational Bureau and the Community College Bureau to collaborate on preparing revisions for the Pennsylvania State Vocational Plan that will include the functions of the community colleges within that plan.

This task is clearly a cooperative one between the vocational education and the community college specialists. It is through the preparation of proper provisions in the State Plan that the vocational leaders can help to clarify and strengthen the role of the community colleges in the preparation of workers for technical and semi-professional careers.

Recommendation No. 16

It is recommended that after the Master Plan Study is available to the State Board of Education, the organizational relationships between professional staffmembers in vocational education and community college education be carefully considered in order to facilitate as close cooperation as possible.

Without having the Master Plan Study recommendations at hand, it is impossible for us to suggest specifics that would prove meaningful. Rather, it seems important to us that the state organizational pattern reflect the principles stressed in Section I of this Report regarding the relationship of community college to vocational preparation. State departmental organization should support these functions.

Recommendation No. 17

It is recommended that the State Board through its professional staff formulate plans and procedures for state accreditation of the new community colleges, and for encouraging and assisting these colleges in the attainment of regional accreditation.

New institutions need a great deal of assistance from state authorities. This is given in many ways, most of them informal and in relationship to specific problems encountered by the local institution. In addition, however, formal accreditation by the State would assist the community college in attaining recognition for those of its students who apply for transfer to four-year colleges and universities.

As soon as the community college can achieve accreditation by the regional accrediting body, State accreditation could be based on that status. State authorities should exert every effort in stimulating and assisting the local institution to attain regional accreditation at the earliest possible time.

B. THE PROFESSIONAL STAFF AT THE STATE LEVEL

Role of the professional staff

Recommendation No. 18

It is recommended that the State Board view the professional staff as its source of information, advice and counsel with respect to all community college problems and policies, and for the implementation of Board policies.

It should be the function of the professional staff members concerned with community college development to keep the Board informed regarding community college affairs. All available data should be shared with the Board through the proper administrative channels, for such data provide a logical foundation for policy decisions.

Recommendation No. 19

It is recommended that the professional staff concerned with community colleges develop appropriate research plans and carry out or supervise the research studies, evaluation reports, and other appropriate studies authorized by the Board or deemed appropriate by the staff.

This recommendation is based on the belief that one of the primary functions of the state authorities is to see that the knowledge necessary to develop and implement policy is as available as possible to all concerned. The types of studies envisioned were discussed in some detail in Section III.

Recommendation No. 20

It is recommended that the coordination of community college education be undertaken through various leadership activities by the professional staff.

One of the most helpful activities would be the inauguration of curriculum task forces made up of representatives from the community colleges and other institutions in the State. Newly organized faculties need and welcome assistance in the development of programs and courses, and cooperative, voluntary curriculum groups constitute excellent sources of help.

Similar cooperation among guidance and admissions officers, for instance, could also be stimulated, and every assistance should be proffered to the presidents and deans in developing close working relationships as a group.

Visitation of community colleges by the state staff will be a major activity, both for the purpose of acquainting the staff with the developments in the community colleges and the problems being encountered, and for the opportunity to consult with and assist local officials in the improving of the local institutions. It needs to be constantly reiterated, however, that the responsibility for the administration of the individual institutions is in the hands of the local authorities and officials; the role of the state staff is to consult and advise, upon request.

In-service education conferences and workshops would also constitute a major leadership activity of staffmembers. As the number of community colleges grows, more and more of the State's influence will need to be exerted through such group undertakings rather than through individual visitation and consultation. Fortunately, for many purposes group work is more effective than individual conferences because of the interaction among individuals in different situations or with different points of view.

Recommendation No. 21

It is recommended that the State Board through its professional staff *undertake the necessary steps for establishing auditing procedures for the State's community colleges.*

The auditing procedure, of course, involves other state authorities, but the primary obligation for initiating plans and procedures lies with the Board. The importance of a satisfactory auditing procedure for the procurement of current reimbursement can hardly be overstated; thus this function of the professional staff commands a very high priority.

Size and qualifications of staff

Recommendation No. 22

It is recommended that the professional staff concerned with community college education be envisioned as a small one composed of highly competent individuals.

It is our opinion that the competence of the educators brought onto the State Staff is of the greatest importance. This conviction is based on the assumption that these individuals would be buttressed with the technical and secretarial assistants needed to carry out their various tasks. It is also recommended that a sufficient budget be available for the use of consultants and specialists as they are needed, rather than envisioning the full-time retention of highly specialized personnel.

It is difficult to determine or specify either an exact number or the specific qualifications of the staff which will be needed, but we would advance the belief that three members are essential: one a generalist in community college administration and program development, one a specialist in semi-professional and technical education, and one a specialist in community college campus development. It would help if one of these would have special interest or experience in the financial problems of community colleges.

Recommendation No. 23

It is recommended that the State Board reassess the salary of the Department's chief official for community college education and exert every effort to make it roughly equivalent to the salaries of community college presidents in the State.

The logic of this recommendation is that if the head of the community college bureau is to be effective as the state official giving leadership to the community college presidents in the Commonwealth, he must be their peer in ability, preparation and experience; therefore he must be on a comparable salary status. He must also deal with the presidents of all the institutions of higher education in the State. This does not mean that the state salary must equal the highest community college salary, but it should be well up in the range of salaries commanded by the chief executives of the two-year colleges.

C. RELATIONSHIP OF COMMUNITY COLLEGES TO PENNSYLVANIA'S SYSTEM OF HIGHER EDUCATION

The fairly detailed analysis in Section I of this report dealing with the relationships of community colleges to the institutions of higher education in the State serves as a backdrop against which the following recommendations are offered. In it a number of problems were seen in clearer perspective. The relationships seem to divide rather clearly into two kinds: those with four-year colleges and universities in general, and those with the off-campus extention centers. Our recommendations, therefore, have been grouped around these two focal points.

Community colleges' relationships with four-year colleges and universities

Recommendation No. 24

It is recommended that the State Board exert its leadership to encourage all four-year colleges and universities to accept well-qualified community college students as transfers.

Little difficulty is anticipated in this regard, for the response to inquiries by the college which has opened and those beginning this Fall has been an almost unanimous reply that the applicants from these institutions would receive full consideration. It would, however, be both helpful and proper for the Board to underscore its policy of placing importance on the community college as an instrument for extending collegiate opportunities for additional numbers with the statement that the Board hopes that qualified students from these institutions will find opportunity to go further with their educational careers.

Recommendation No. 25

It is recommended that the State Board initiate with the presidents of the state colleges appropriate discussions regarding the need to plan for the accommodation in due course of community college transfers.

This recommendation is based on the assumption that while the Board's responsibility with all Pennsylvania colleges is to encourage the acceptance of community college students as transfers, with the state colleges it also includes the development of definite plans for accommodating the state colleges' expected share.

Recommendation No. 26

It is recommended that the State Board stimulate and encourage the universities of the Commonwealth to develop graduate programs for the preparation of community college instructors and administrators.

As the community colleges increase in number and size, the demand for personnel will be substantial. The responsibility of the Board to anticipate this need is clear, and among the sources of supply will be the graduate programs in the universities. Much of the preparation for community college teaching is the same as that for all undergraduate teaching, but there are helpful contributions which a special program can make: a course dealing with the community college as an institution, study of the psychology of learning and the problems of college teaching, and if possible an internship experience.

Included in the range of programs in the community colleges are some areas not represented in typical university programs. Instructors for these will have to be recruited from other-than-university sources, but a few graduate institutions might be interested in developing short, intensive programs to help these instructors acquire theoretical and professional work they need to supplement the specialization acquired through careers in industry, business, or government.

Community colleges and off-campus extension centers

For the person who is unacquainted with higher education in Pennsylvania it should be recalled that off-campus centers have played an important part throughout the recent decades. We have identified some 31 operations being conducted at the present time that are classified as off-campus center, during 1964-65 enrolling a total of 8,994 full-time and part-time students. (See Appendix K)

In Section I the possible community college relationships to off-campus centers were explored. That analysis and the potential problems revealed in the study of individual counties and areas, serve as the basis for several recommendations regarding community colleges and off-campus centers.

Recommendation No. 27

It is recommended that the State Board, in order to assess the future place and functions of off-campus centers in Pennsylvania's system of higher education, initiate arrangements for an intensive study of the operation and programs of those in existence.

This suggestion is based on the assumption that the Master Plan Study does not embrace a systematic evaluation of the purposes, programs, and operations of the off-campus centers. Such an analysis is needed to assist the State Board in establishing the long-term policies.

Recommendation No. 28

It is recommended that the State Board approve no new extension centers in any of the areas labeled as high priorities for community colleges, (those listed in Groups II and III).

This recommendation is based on the conviction that where a community college is needed and feasible, it will in the long run meet more of the community needs than an off-campus center could. While the community college will cost the local community more money in direct taxation, it will provide the opportunity for a great many more students to go to college than will a center. These potential advantages flow out of the purposes which the community college is established to serve, which are different from those of centers which are extensions of, and therefore appropriately reflect the purposes of, parent institutions.

This recommendation is also based on the assumption that the policy of the Board to stimulate and assist the establishment of community colleges in high priority areas is to be implemented as fully and as rapidly as possible.

Recommendation No. 29

It is recommended that as areas are discovered where existing extension centers and proposed community colleges are felt to overlap or conflict, ad hoc committees of the State Board, with the assistance of staff studies, determine the long-range provisions that would seem best suited for the area under consideration.

Not very many of these situations will arise if no new extension centers are created. Our studies have identified a few areas in which problems are almost inevitable and will have to be solved either by local cooperation or by Board coordination. All of these have been commented upon in the regional analyses.

D. FINANCES

Recommendation No. 30

It is recommended that the State Board initiate consideration of a long-range policy of reducing student tuition by decreasing within a period of years the proportion of operating costs paid by the students from the present one-third to one-fifth.

A full discussion of this rather complex issue is contained in the section in the report of finance, which we hope will be helpful in the consideration of this recommendation. The relationship of this recommendation to the one concerning scholarships and loans is also discussed in that same section.

Recommendation No. 31

It is recommended that the State Board give serious study to the need as a long-range policy for an equalization plan that would assist areas with low economic resources to support community colleges.

We recognize the complexity of plans for assisting less affluent areas, and that the principle of equalization must be applied in a different fashion in each state because of a variety of legislative, economic, governmental and educational conditions. Therefore, the initiation of any move toward proposing the implementation of an equalization policy would have to be based on a detailed analysis of Pennsylvania's situation by persons competent in the field of state finance.

Recommendation No. 32

It is recommended that the State Board give serious consideration to the problem certain community college sponsors face in securing funds for capital outlay, for the purpose of devising ways of assisting with this problem.

One of the suggestions offered in the discussion of this problem in our report is that of creating a State Fund for Community College Capital Outlay to be administered under the jurisdiction of the Board. The Board may very well come up with a simpler way of helping the colleges, but the state fund idea is worth exploring as one possibility.

Until a long-term policy is devised with respect to capital outlay, it will of course be the Board's responsibility to see that the State's share of the cost of amortizing capital funds is provided.

Recommendation No. 33

It is recommended that the State Board encourage a few community colleges to experiment with year-round operation.

In order to do this, it would be necessary for the Board to secure a change in the limit of $350 established for state reimbursement for the third tri-mester. However, this would seem well worth doing.

E. EDUCATIONAL PROGRAMS, FACILITIES, AND FACULTY

Recommendation No. 34

It is recommended that the State Board through its professional staff and its review of programs submitted by the community colleges, emphasize the development of comprehensive programs.

The comprehensiveness of the community college has been stressed throughout this study and report; consequently, no detailed justification for this policy is needed at this point. It should be reiterated, however, that programs for adults of all ages are just as important as the offerings for youth immediately out of high school. State leadership must emphasize continuing education, and the local institutions should be encouraged to appoint administrative staff for adult programs.

Recommendation No. 35

It is recommended that the State Board and its professional staff exert great effort to assist community colleges to develop excellent teaching as their primary goal.

The quality of the community college staffs and the excellence of their teaching will in the long run determine the status of the community colleges in Pennsylvania. In several places in this report we have touched on the role of state leadership in creating the climate for excellent teaching. Curriculum development programs, cooperative projects, grants for exceptional ventures, encouragement of high salary schedules and generous personnel policies, assistance in planning functional buildings and securing high quality equipment, the sharing of modern teaching materials -- every appropriate means should be utilized to develop a climate that stresses good teaching.

Recommendation No. 36

It is recommended that the State Board and its professional staff stress constantly the development of admissions practices and procedures that will implement the Board's policy of universal opportunity for community college education in the State of Pennsylvania.

Although the full attainment of this recommendation is recognized as being a long-range goal, admissions practices from the very beginning should encourage the attendance at community colleges of students who might not have the opportunity of attending elsewhere. Comprehensive programs and students with a wide range of abilities go hand-in-hand.

Recommendation No. 37

It is recommended that the State Board and its professional staff give every encouragement to community colleges to develop adequate guidance staffs and services.

State leadership in this area is essential; guidance conferences, state-wide workshops for guidance personnel, leadership in the development of student personnel report forms, encouragement of regional conferences of secondary and collegiate guidance personnel -- these and many other activities should be developed when deemed appropriate.

Recommendation No. 38

It is recommended that the State Board and its professional staff encourage the community colleges in the development of a system of faculty leaves, with financial assistance as a feature of the plan.

Probably no one factor is more important in establishing a climate that encourages both scholarship and good teaching than the provisions made for faculty leaves. In Section III several suggestions regarding desirable policies were presented, and it is our hope that these will provide both stimulation and guidance in this important endeavor.

Recommendation No. 39

It is recommended that the State Board and its professional staff initiate serious consideration and study of how the community colleges that are being and will be established in Pennsylvania can be assisted in the development of adequate and functional buildings.

Because so many new campuses are to be developed in such a short period of time, it has been suggested in another section of this report that one of the community college consultants on the state staff have campus planning as his specialty. Such a consultant could contribute significantly to the development of excellent buildings throughout the State.

F. LEGISLATION

There follow below recommendations regarding specific legislation that is needed to implement some of the policy recommendations in the preceding parts of this section. For this reason they have been organized under appropriate headings to designate the area of policy needing implementation.

Eligibility to attend community colleges

Recommendation No. 40

It is recommended that the State Board seek the enactment of legislation establishing the right of all Pennsylvania residents to attend any community college within the State if they are academically admissible.

It is further recommended that the State Board seek the enactment of legislation establishing the procedure whereby the community college attended will receive reimbursement for the local district's one-third of operating costs from the county or district of residence.

It is further recommended that the State Board seek the enactment of legislation establishing a charge of $50.00 per student per semester of attendance (as reimbursement for capital outlay costs) to be paid by the county or district of residence to the community college attended.

These three recommendations are all necessary if residents in areas with little or no chance for the establishment of community colleges in the foreseeable future are to have some opportunity to attend a community college. Practically all states that have developed a system of community colleges have found it necessary to enact legislation making some such provisions as those provided above.

The consent of an existing community college should be required for such out-of-district attendance, but it should be written into the legislation that the desire to enroll in a program not offered by the community college in the area of residence should constitute a valid reason for such consent. The acceptance of other reasons as justification would be at the discretion of the college officials involved.

Recommendation No. 41

It is recommended that the State Board seek the enactment of legislation that would provide that the district of residence which does not provide community college facilities and which lies within commuting distance of a community college in one of the adjoining states should pay an amount equivalent to the local district's share of operating costs to the community college in such state, for those students who attend the community college.

It is further recommend that the Board seek legislation which would provide that in such cases the State of Pennsylvania would provide to such students a state scholarship equivalent to the State's one-third of tuition in a Pennsylvania community college.

In a few counties residents of Pennsylvania reside within commuting distance of a community college in a neighboring state. Where no Pennsylvania community college is established, it would seem appropriate to make attendance at the neighboring state's community college available at approximately the same cost to the student as would be involved were a Pennsylvania community college accessible. Agreements would have to be negotiated with the out-of-state colleges for the implementation of this proposal, and New York State officials have indicated a willingness to discuss this possibility.

Recommendation No. 42

It is recommended that the State Board seek the enactment of legislation stipulating that no participating sponsor in a multi-sponsored venture can establish arbitrary limitations on the number of students from its area who can attend the community college.

The purpose to be accomplished by this legislation would be the further guarantee to eligible Pennsylvanians that their right to attend the community college cannot be abridged by refusal of the participating sponsor to cover its share of the cost of such attendance. Eligibility to the program being offered should be the criterion for entrance.

Legislation regarding local colleges

Recommendation No. 43

It is recommended that the State Board exert every effort to procure the passage of legislation to clarify the relationships of sponsors and boards of trustees along the lines developed in this Study.

These relationships are complex and have been discussed at length in Section III: in very brief summation it is our point of view that the primary responsibility of the Board of Trustees should be to administer the local college, while that of the sponsor should be to establish the college, select the trustees, and finance the college in accordance with legislative and contractual provisions. The proposed legislation which is at present being considered in the legislature is in most instances likely to be helpful in forwarding sound sponsor-trustee relationships. However, the provision regarding single sponsors being charged with reviewing and approving the budget and responsible for creating regulations to govern fiscal and operating procedures, in our opinion will be in the long run extremely deleterious to the development of proper relations between sponsor and trustees. It is our recommendation that this legislation be opposed by the Board.

Recommendation No. 44

It is recommended that the State Board develop and propose legislation with specific procedures for the selection of members of boards of trustees for community colleges.

The procedures for the selection of trustees probably could be provided in general terms by legislation and spelled out in detail by State Board regulations. In Section III of our report several suggestions for securing outstanding citizens who constitute a good representation of community interests have been set forth.

Recommendation No. 45

It is recommended that the State Board initiate action to develop, as a long-range goal, an additional alternative method of organizing community colleges, that of a fiscally independent district.

This is recognized as a long-term suggestion for a substantial amount of work will be required to prepare legislative proposals. Sections of Pennsylvania law other than those dealing with the community college act will have to be considered in developing such an alternative. It is our opinion, however, that the availability of another method of organizing will ultimately prove advantageous to certain areas.

Recommendation No. 46

It is suggested that the State Board take steps to develop suggested legislation providing procedures for areas contiguous to established community colleges to join such colleges.

The basic assumption back of this proposal is that such action would be entirely voluntary on the part of both college and contiguous areas, and that the procedures merely need to be spelled out.

Recommendation No. 47

It is recommended that the State Board exert its influence to keep the present definition of full-time student.

The effects of changing the number of semester hours to 15 have been set forth in Section III. Briefly, it is felt that such a change would make it somewhat more difficult for community colleges to provide flexibility for students who enroll in developmental programs, would make it less likely that adjusted loads for probationary students would be commonly prescribed, and would not encourage colleges to provide counseling services for part-time students. The 12 semester hour regulation by the Board is in harmony with many federal provisions or stipulations, and therefore having it as the Pennsylvania definition assists substantially in filing of reports and the submission of applications and requests with the Office of Education, Veterans Administration, and the like.

Financial items

Recommendation No. 48

It is recommended that the State Board take the responsibility for *securing legislation, adopting regulations, and promoting procedures at the state level which will assure community colleges that they will receive the State's share of operating funds on a current basis.*

It is essential that community colleges receive state reimbursement during the year in which the money is expended, although this is somewhat more critical for multiple school district sponsors than for county sponsors. Raising their own shares of operating and capital outlay funds will entail considerable financial strain for many of the community college sponsors; for them to carry the added burden of furnishing the State's share of operating funds for an entire year would seem to be both unnecessary and unsound. Therefore, the Board should not only support the legislative proposals now pending with respect to current reimbursement, but should also be responsible for negotiating appropriate procedures with the State's executive officials involved in the process of reimbursement.

Recommendation No. 49

It is recommended that the State Board initiate action to obtain legislation limiting the fees that local community colleges would be allowed to assess over and above tuition.

The rationale behind this recommendation as well as some of the detailed suggestions regarding it have been discussed in Section III and will not be repeated here.

Recommendation No. 50

It is recommended that the State Board exert every effort to see that a state plan for scholarships and loans is enacted and that community college students are included as participants in it.

The importance of scholarships and loans for community college students is due to the fact that one of the major purposes of these community institutions is to make collegiate opportunities available at a cost that will enable some students to attend community colleges who would not otherwise have the opportunity to go to college because of financial obstacles. While community college tuitions are modest compared to those of some other institutions, they will still be high enough to constitute barriers for some. Scholarship aid from the State could alleviate the problem of finances for, it is hoped, a substantial number of students.

Facilities

Recommendation No. 51

It is recommended that the State Board exert leadership to secure amendments in the legislation which would authorize the construction of adequate facilities for health and physical education, music, dramatics, and food services, as well as for facilities for student activities.

Campuses for community colleges must contain all the educational facilities required for a comprehensive collegiate program. A college without health and physical education facilities cannot provide the instructional activities needed for the health development of individuals; a college without facilities for instruction in music and dramatics cannot develop offerings in areas that have been important collegiate undertakings for centuries and which are perhaps prominent in the lives of more people today than in any time in history.

Since those attending community colleges are commuters, food services are essential, and not only for day students but for part-time adults students who come to college directly from work. Also, in order for students to develop an identification with the community college, they need to participate in the life of the college. Although community colleges must not ape the activities which are a natural part of residential colleges, they should and can develop a wholesome student-life program. Such a program calls for appropriate facilities -- these must be provided, or else the institution is not a college but merely a collection of classrooms.

Furthermore, in order to serve their communities properly, they need to develop into cultural centers for adults as well as full-time college students.

Recommendation No. 52

It is recommended that the State Board encourage the inclusion of a wide variety of classrooms and instructional media in college buildings, including at least one very large classroom fully equipped for modern communications.

Community colleges should be in the forefront of instructional ventures at the college level; flexibility of facilities is perhaps even more important with them than with colleges with less comprehensive programs; consequently, any legislative or regulatory provisions which hamper the development of flexible programs is neither wise nor economical.

Recommendation No. 53

It is recommended that the State Board propose and exert efforts to secure the passage of legislation which would provide that a few especially approved community colleges could provide a limited number of dormitory facilities.

This recommendation contains very important limitations, for it is not the purpose in proposing this suggestion that the fundamental character of the community college be changed from that of a college primarily for commuting students. Rather, it is our conviction that in a few cases the ability to provide dormitory accommodations would make it possible for these colleges to serve Pennsylvania residents who otherwise might have no college opportunities open to them. Our analysis would point to the Williamsport, North Central, and West Central Regions as areas where this possibility should be given careful consideration.

Faculty

Recommendation No. 54

It is recommended that the State Board work for the enactment of legislation which would make community college staff members eligible for membership in the State Employee's Retirement Fund and the Public School Teachers Retirement Fund.

It is essential, since community college instructors will come from a variety of sources, that they be provided with the option of eligibility to both of these groups.

Non-conversion to 4-year status

Recommendation No. 55

It is recommended that the State Board propose and work for the passage of legislation which would provide that no community college can be changed into a four-year baccalaureate institution.

Practically all states that have developed two-year college systems for well-defined purposes and functions have found that it is necessary, in order to guarantee the accomplishment of those purposes, to safe-guard the preservation of the two-year college. Where four-year public institutions are needed, they should be created *de novo* after careful studies of need and the problem of location. This process is essential if the Board is to carry out its function of coordinating the development of Pennsylvania public institutions of higher education into a system.

It has been deemed appropriate in this section of the report to make recommendations that range from those which deal with broad policy matters to some that treat very specific matters in detail. As we conclude, it seems desirable to return once more to a general overview of the Board's responsibility with respect to the development of community colleges in the State. While its responsibilities are many and varied, in essence it has to spearhead the drive to attain a system of community colleges that will serve Pennsylvania's needs. As policy maker, spokesman, and implementer, this is its goal, its purpose.

APPENDICES

APPENDIX A

POPULATION DATA BY COUNTIES

County	Actual Population				Projected Population		
			Change 1950-60				
	1950	1960	No.	%	1965	1970	1972
Adams	44,197	51,906	7,709	17.4	57,591	64,072	71,360
Allegheny	1,515,237	1,628,587	113,350	7.5	1,674,165	1,729,323	1,792,198
Armstrong	80,842	79,524	-1,318	-1.6	78,267	76,646	74,927
Beaver	175,192	206,948	31,756	18.1	221,480	232,767	244,749
Bedford	40,775	42,451	1,676	4.1	43,181	43,753	44,336
Berks	255,740	275,414	19,674	7.7	284,893	294,678	305,435
Blair	139,514	137,270	-2,244	-1.6	136,223	134,673	132,675
Bradford	51,722	54,925	3,203	6.2	56,715	58,466	60,463
Bucks	144,620	308,567	163,947	113.4	383,999	473,663	585,892
Butler	97,320	114,639	17,319	17.8	123,981	134,514	146,470
Cambria	209,541	203,283	-6,258	-3.0	198,623	193,609	188,329
Cameron	7,023	7,586	563	8.0	7,349	7,100	6,883
Carbon	57,558	52,889	-4,669	-8.1	51,421	49,645	47,696
Centre	65,922	78,580	12,568	19.2	83,891	89,468	94,763
Chester	159,141	210,608	51,467	32.3	242,171	280,402	326,634
Clarion	38,344	37,408	-936	-2.4	37,021	36,630	36,203
Clearfield	85,957	81,534	-4,423	-5.1	78,902	75,897	72,800
Clinton	36,532	37,619	1,087	3.0	38,040	38,468	38,822
Columbia	53,460	53,489	29	0.1	53,484	53,331	52,944
Crawford	78,948	77,956	-992	-1.3	77,692	77,364	77,156
Cumberland	94,457	124,816	30,359	32.1	144,284	167,633	195,488
Dauphin	197,784	220,255	22,471	11.4	232,397	246,760	263,843
Delaware	414,234	553,154	138,920	33.5	617,928	687,207	763,360
Elk	34,503	37,328	2,825	8.2	38,343	39,407	40,425
Erie	219,388	250,682	31,294	14.3	267,427	288,320	314,240
Fayette	189,899	169,340	-20,559	-10.8	157,647	148,788	139,136
Forest	4,944	4,485	-459	-9.3	4,479	4,407	4,310
Franklin	75,927	88,172	12,245	16.1	92,719	97,331	102,022
Fulton	10,387	10,597	210	2.0	10,775	10,939	11,100
Greene	45,394	39,424	-5,970	-13.2	36,855	34,214	31,632
Huntingdon	40,872	39,457	-1,415	-3.5	38,849	38,849	37,129
Indiana	77,106	75,366	-1,740	-2.3	74,659	73,731	72,773
Jefferson	49,147	46,792	-2,355	-4.8	45,136	43,264	41,308
Juniata	15,243	15,874	631	4.1	16,246	16,612	16,994
Lackawanna	257,396	234,531	-22,865	-8.9	237,570	233,335	229,788

APPENDIX A - POPULATION DATA BY COUNTIES (cont.)

	Actual Population				Projected Population		
			Change 1950-60				
County	1950	1960	No.	%	1965	1970	1975
Lancaster	234,717	278,359	43,642	18.6	298,426	320,508	344,567
Lawrence	105,120	112,965	7,845	7.5	116,515	120,804	125,643
Lebanon	81,683	90,853	9,170	11.2	93,930	96,782	99,382
Lehigh	198,207	227,536	29,329	14.8	242,043	257,584	274,875
Luzerne	392,241	346,972	-45,269	-11.5	338,099	325,094	310,880
Lycoming	101,249	109,367	8,118	8.0	113,091	117,436	122,331
McKean	56,607	54,517	-2,090	-3.7	54,565	54,499	54,385
Mercer	111,954	127,519	15,565	13.9	135,946	145,682	156,726
Mifflin	43,691	44,348	657	1.5	44,522	44,515	44,458
Monroe	33,773	39,567	5,794	17.2	42,967	46,739	50,903
Montgomery	353,068	516,682	163,614	46.3	581,437	652,966	732,421
Montour	16,001	16,730	729	4.6	17,703	18,326	19,123
Northampton	185,243	201,412	16,169	8.7	208,830	216,781	225,159
Northumbrlnd	117,115	104,138	-12,977	-11.1	100,937	97,316	93,455
Perry	24,782	26,582	1,800	7.3	27,016	27,385	27,680
Philadelphia	2,071,605	2,002,512	-69,093	3.3	1,990,861	2,008,676	2,055,403
Pike	8,425	9,158	733	8.7	9,993	10,569	11,120
Potter	16,810	16,483	-327	-1.9	16,357	16,216	16,136
Schuylkill	200,577	173,027	-27,550	-13.7	162,503	147,277	133,075
Snyder	22,912	25,922	3,010	13.1	27,333	29,060	30,825
Somerset	81,813	77,450	-4,363	-5.3	76,905	75,903	74,763
Sullivan	6,745	6,251	-494	-7.3	6,039	5,767	5,470
Susquehanna	31,970	33,137	1,167	3.7	33,767	34,318	34,950
Tioga	35,474	36,614	1,140	3.2	38,258	39,243	40,382
Union	23,150	25,646	2,496	10.8	27,845	29,604	31,593
Venango	65,328	65,295	-33	-0.1	65,039	64,739	64,514
Warren	42,698	45,582	2,884	6.8	47,075	48,633	50,383
Washington	209,628	217,271	7,643	3.6	219,493	221,430	223,159
Wayne	28,478	28,237	-241	-0.8	29,404	29,731	30,287
Westmoreland	313,179	352,629	39,450	12.7	369,770	387,636	406,614
Wyoming	16,766	16,813	47	0.3	17,181	17,100	17,112
York	202,737	238,336	35,599	17.6	257,884	279,890	305,388

Sources: Columns (2), (3) and (7), The Population of Pennsylvania: A Social Profile. Pennsylvania State Planning Board, September, 1963, p.4; columns (4) and (5), An Economic Atlas of Pennsylvania, Pennsylvania State Planning Board, 1964, p.44; columns (6) and (8) were excerpted from data in The Population of Pennsylvania: Projections to 1980, Pennsylvania State Planning Board, June 1, 1963, pp 164-190.

APPENDIX B

SELECTED DEMOGRAPHIC FACTORS BY COUNTY

County	Migration 1950-1960	Population Density 1960*	Percent Urban Pop. 1960	Labor Force 1960 Total	Labor Force 1960 Unem-ployed	Labor Force 1960 Percent Unempl'd
Adams	955	99	26.1	20,994	1,001	4.8
Allegheny	-83,481	2,230	93.2	615,538	37,925	6.2
Armstrong	-12,063	121	23.2	26,182	2,596	9.9
Beaver	2,382	469	70.9	75,949	5,253	6.9
Bedford	-3,907	42	8.7	14,523	1,056	7.3
Berks	-1,886	318	64.3	121,695	4,585	3.8
Blair	-15,958	258	68.3	48,731	2,555	5.3
Bradford	-3,172	47	30.5	19,748	908	4.6
Bucks	118,390	500	75.3	114,195	3,946	3.5
Butler	1,609	144	29.3	39,894	1,872	4.7
Cambria	-35,247	292	60.6	67,710	6,007	8.9
Cameron	-725	19	44.8	2,840	180	6.3
Carbon	-8,878	130	64.0	20,792	2,202	10.6
Centre	1,900	70	41.2	27,821	1,197	4.3
Chester	26,460	277	43.8	79,639	2,133	2.7
Clarion	-5,807	62	13.3	13,027	927	7.1
Clearfield	-13,681	71	28.4	28,517	3,047	10.7
Clinton	-3,417	42	40.0	13,962	685	4.9
Columbia	-4,935	110	45.3	21,862	1,260	5.8
Crawford	-9,312	77	32.1	29,171	2,030	7.0
Cumberland	14,830	225	59.1	49,425	1,573	3.2
Dauphin	-1,937	423	76.9	90,556	2,686	3.0
Delaware	64,225	1,990	96.0	214,281	7,747	3.6
Elk	-2,772	46	52.0	14,076	1,581	11.2
Erie	-5,460	309	77.1	94,594	7,702	8.1
Fayette	-40,594	213	30.1	52,831	6,928	13.1
Forest	-809	11		1,573	107	6.8
Franklin	1,100	117	36.5	34,711	1,700	4.9
Fulton	-1,171	24		3,709	234	6.3
Greene	-10,546	68	13.2	12,522	1,174	9.4
Huntingdon	-5,825	44	28.7	13,340	1,050	7.9
Indiana	-10,752	91	23.8	25,504	2,452	9.6
Jefferson	-7,232	72	40.9	16,743	1,456	8.7
Juniata	-1,380	41		5,864	330	5.6
Lackawanna	-38,648	516	89.8	90,950	7,243	8.0

APPENDIX B - SELECTED DEMOGRAPHIC FACTORS BY COUNTY (cont.)

County	Migration 1950-1960	Population Density 1960*	Percent Urban Pop. 1960	Labor Force 1960		
				Total	Unem-ployed	Percent Unempl'd.
Lancaster	7,625	294	49.5	116,535	3,295	2.9
Lawrence	-7,177	308	52.6	40,903	2,812	6.9
Lebanon	-2,522	250	49.1	38,031	1,113	2.9
Lehigh	7,433	655	79.4	96,896	3,656	3.8
Luzerne	-69,101	389	81.1	135,566	13,464	10.1
Lycoming	-4,888	90	60.6	43,291	2,698	6.2
McKean	-8,275	55	42.5	21,425	1,501	7.0
Mercer	-1,903	187	53.8	46,752	2,649	5.7
Mifflin	-4,921	103	34.7	17,433	809	4.6
Monroe	2,470	65	34.7	15,755	726	4.6
Montgomery	109,619	1,052	79.5	206,109	4,943	2.4
Montour	-910	128	41.2	5,552	314	5.7
Northampton	-3,673	538	68.7	83,449	3,310	4.0
Northumbrlnd	-21,854	229	62.0	41,130	3,385	8.2
Perry	-1,458	48	9.7	9,746	553	5.7
Philadelphia	-276,168	15,767	100.0	839,495	50,897	6.1
Pike	555	17		3,378	209	6.2
Potter	2,111	15	17.5	6,030	409	6.8
Schuylkill	-38,449	221	54.1	68,991	8,337	12.1
Snyder	449	79	15.2	9,287	702	7.6
Somerset	-13,286	72	21.0	26,280	3,184	12.1
Sullivan	-1,107	13		2,211	167	7.6
Susquehanna	-2,244	40	15.8	11,811	814	6.9
Tioga	-3,228	32	19.2	13,534	601	4.4
Union	218	81	21.5	9,063	663	7.3
Venango	-7,807	97	52.1	22,226	1,316	5.9
Warren	-1,837	50	31.8	16,742	702	4.2
Washington	-16,510	253	41.1	76,502	5,666	7.4
Wayne	-1,934	38	19.7	10,473	724	6.9
Westmoreland	1,859	344	60.7	124,086	11,093	8.9
Wyoming	-1,212	43		5,982	392	6.6
York	6,911	261	54.1	100,098	4,399	4.4

*Persons per square mile.
Source: An Economic Atlas of Pennsylvania, Pennsylvania State Planning Board, 1964.

APPENDIX C

SELECTED ECONOMIC FACTORS

County	Total Personal Income 1960 (in thousands)		Median Family Income 1960	Per Capita Income 1960	Assessed Valuation for 1965 (Estimated)
	By County of Source	By County of Residence			
(1)	(2)	(3)	(4)	(5)	(6)
Adams	$ 78,641	$ 94,458	$4,945	$1,819	$ 36,916,000
Allegheny	4,357,186	4,023,246	6,173	2,470	3,619,434,000
Armstrong	117,278	151,073	5,033	1,900	74,774,000
Beaver	543,223	470,310	5,777	2,272	297,834,000
Bedford	47,694	65,439	4,265	1,542	27,071,000
Berks	617,003	639,614	5,799	2,322	356,200,000
Blair	259,888	248,777	5,141	1,812	185,592,000
Bradford	82,520	96,639	4,906	1,759	38,837,000
Bucks	473,152	686,338	6,782	2,224	457,061,000
Butler	200,633	251,848	5,815	2,196	148,759,000
Cambria	405,628	387,637	4,753	1,907	209,541,000
Cameron	21,584	23,683	6,548	3,121	8,225,000
Carbon	80,592	95,114	4,815	1,798	49,835,000
Centre	114,718	118,998	5,202	1,514	84,182,000
Chester	432,574	450,227	6,604	2,138	420,517,000
Clarion	55,326	73,098	4,804	1,956	24,504,000
Clearfield	120,039	140,088	4,640	1,718	76,809,000
Clinton	78,230	75,348	5,207	2,002	26,949,000
Columbia	108,633	105,364	4,855	1,970	55,035,000
Crawford	132,745	163,617	5,110	2,099	80,401,000
Cumberland	239,063	285,102	6,046	2,284	172,374,000
Dauphin	771,531	564,467	5,796	2,562	279,409,000
Delaware	914,910	1,382,755	7,632	2,500	607,082,000
Elk	72,194	78,159	5,641	2,093	23,921,000
Erie	535,756	557,843	5,736	2,225	307,021,000
Fayette	193,994	279,787	4,291	1,652	150,951,000
Forest	6,049	7,047	4,641	1,571	4,018,000
Franklin	177,448	175,947	4,882	1,995	124,002,000
Fulton	9,959	14,598	3,857	1,378	9,237,000
Greene	63,584	60,802	4,441	1,542	62,758,000
Huntingdon	52,551	62,398	4,138	1,581	34,004,000
Indiana	103,653	118,923	4,907	1,578	73,839,000
Jefferson	78,908	79,738	4,568	1,704	36,419,000
Juniata	17,464	24,674	4,062	1,554	15,830,000
Lackawanna	419,909	444,573	4,896	1,895	185,402,000

APPENDIX C - SELECTED ECONOMIC FACTORS (cont.)

County	Total Personal Income 1960 (in thousands)		Median Family Income 1960	Per Capita Income 1960	Assessed Valuation for 1965 (Estimated)
	By County of Source	By County of Residence			
Lancaster	$ 585,355	$ 586,587	$5,810	$2,107	$ 308,187,000
Lawrence	209,664	234,011	5,617	2,072	117,004.000
Lebanon	180,136	191,597	5,512	2,109	168,436,000
Lehigh	531,782	552,207	6,064	2,427	294,558,000
Luzerne	563,037	625,724	4,722	1,803	256,225,000
Lycoming	220,316	222,758	5,235	2,037	114,244,000
McKean	109,861	119,841	5,299	2,198	54,672,000
Mercer	294,445	287,081	5,872	2,251	159,981,000
Mifflin	78,870	85,759	4,860	1,934	23,900,000
Monroe	76,638	75,310	5,093	1,903	75,243,000
Montgomery	1,195,902	1,363,697	7,632	2,639	994,494,000
Montour	36,084	27,852	5,134	1,664	15,805,000
Northampton	505,605	491,407	5,709	2,439	536,380,000
Northumberland	173,942	193,872	4,544	1,862	67,511,000
Perry	21,744	37,233	4,725	1,401	18,461,000
Philadelphia	6,592,318	5,391,066	5,782	2,692	4,521,125,000
Pike	8,494	17,357	4,872	1,895	21,953,000
Potter	17,616	27,792	4,547	1,686	14,245,000
Schuylkill	255,180	306,847	4,605	1,773	145,686,000
Snyder	29,807	34,141	4,648	1,317	16,873,000
Somerset	76,071	108,781	4,055	1,404	45,336,000
Sullivan	6,349	9,254	4,322	1,480	3,975,000
Susquehanna	38,968	54,281	4,815	1,638	22,048,000
Tioga	51,759	61,627	4,775	1,683	28,347,000
Union	30,453	37,996	5,032	1,481	17,511,000
Venango	120,247	130,725	5,307	2,002	54,603,000
Warren	90,100	92,071	5,756	2,020	82,410,000
Washington	363,652	456,247	5,386	2,099	219,666,000
Wayne	42,760	45,683	4,444	1,617	21,844,000
Westmoreland	640,548	739,355	5,597	2,096	314,977,000
Wyoming	18,130	24,211	4,247	1,440	15,756,000
York	550,907	570,901	5,678	2,391	205,432,000

Sources: Columns (2) and (3) excerpted from Pennsylvania's Personal Income, 1929-1960, Department of Internal Affairs, (no date), Table 7 and 14, pp. 34-35 and 48-49; column (4) from An Economic Atlas, Pennsylvania State Planning Board, 1964, Figure 13, p.30; column (5) calculated from population data in Appendix A and from column (3) in Appendix C; column (6) calculated from 1963 Market Values of Taxable Real Property, Pennsylvania State Tax Equalization Board, Certified June 30, 1964, p.3.

APPENDIX D

PROJECTION OF FULL-TIME ENROLLMENT POTENTIAL FOR COMMUNITY COLLEGES, 1966 THROUGH 1974, BASED ON FORMULAS "A", "B" AND "C"

Sources and Explanatory Notes

Appendix D deals with high school graduates, projected separately for each of the State's counties for the years 1966, 1970, 1974. High school graduates were estimated for each county by using the cohort survival method based on actual enrollments in grades 1 through 12 during the five-year period 1959-60 through 1963-64. Actual enrollments were obtained from the Pennsylvania Department of Public Instruction. It was assumed that a gradual decline in the State's outmigration, together with an increase in the schools' holding power, would add about 1% annually to the number of students who will graduate from high school during the next ten years. Pennsylvania's efforts to achieve economic growth, to attract new industries and to expand existing ones, and the effectiveness of these measures in retarding and eventually in reversing the State's substantial outmigration, are expected to have an impact on the number of students who remain in school. Moreover, new industries create increasing demands for semi-professional and technical personnel. The availability of readily accessible, low-cost education designed to prepare individuals for employment in such industries should serve as a further incentive to obtain the high school diploma as a prerequisite for entering an appropriate post-secondary institution.

Community college full-time enrollment potentials assume that these institutions will be in operation by the fall of 1965; colleges established after that date will achieve their enrollment potentials at correspondingly later dates. Full-time enrollments were estimated according to three formulas:

Formula "A": 15.0% of the high school graduates enter a community college in 1965; this figure increases by 0.5% annually until, in 1974, 19.5% enter a community college.

Formula "B": 20.0% of the high school graduates enter a community college in 1965; this figure increases by 1.0% annually until 25.0% enter a community college in 1970 and each year thereafter.

Formula "C": 25.0% of the high school graduates enter a community college in 1965; this figure increases by 1.0% annually until, in 1974, 34.0% enter a community college.

Sophomore enrollments were calculated as 50.0% of the previous year's freshmen enrollments, as suggested by the experiences of community colleges throughout the country. While this figure may vary somewhat from county to county, it appears to be the most realistic one.

A number of factors are involved in determining which of the three formulas is the most appropriate one. Whether or not a particular formula is the proper one depends upon the area which the community college is expected to serve. This may be a county, a part of a county, or several counties. And in order to determine the most feasible area, or district, it is necessary first to examine the relevant data for each county -- including, of course, potential enrollments. It may be, for example, that the financial ability of a particular county would not be considered adequate under present provisions to support a community college even though other data might indicate a need for such a college. Or, perhaps, a county might have considerable financial ability but insufficient enrollment potential. These factors need to be considered in the formation of community college districts, as must such additional matters as accessibility, other higher institutions, established patterns of cooperation or obstacles to cooperation, and the like. Thus the determination and application of specific formulas are considered in Section II of this report, dealing with criteria for establishing community college districts.

APPENDIX D

PROJECTION OF FULL-TIME ENROLLMENT POTENTIALS FOR COMMUNITY COLLEGES, 1966 THROUGH 1974, BASED ON FORMULAS "A", "B" AND "C"

County and	Formula	1966 H. S. Grads	1966 Full-Time Freshmen	1966 Total Full-Time	1970 H. S. Grads	1970 Full-Time Freshmen	1970 Total Full-Time	1974 H. S. Grads	1974 Full-Time Freshmen	1974 Total Full-Time
Adams	A	890	138	207	986	173	257	1,032	201	300
"	B	890	187	278	986	247	366	1,032	258	389
"	C	890	231	345	986	296	440	1,032	351	523
Allegheny	A	20,755	3,217	4,819	23,463	4,106	6,025	26,115	5,092	7,464
"	B	20,755	4,359	6,495	23,463	5,866	8,569	26,115	6,529	9,650
"	C	20,755	5,396	8,067	23,463	7,039	10,312	26,115	8,879	12,999
Armstrong	A	1,314	204	309	1,418	248	364	1,439	281	417
"	B	1,314	276	415	1,418	355	519	1,439	360	539
"	C	1,314	342	516	1,418	425	623	1,439	489	725
Beaver	A	3,477	539	798	3,962	693	1,020	4,109	801	1,171
"	B	3,477	730	1,076	3,962	991	1,453	4,109	1,027	1,513
"	C	3,477	904	1,336	3,962	1,189	1,746	4,109	1,397	2,039
Bedford	A	714	111	167	810	142	213	911	178	267
"	B	714	150	225	810	203	305	911	228	342
"	C	714	186	279	810	243	356	911	310	451
Berks	A	4,202	651	974	4,463	781	1,139	5,142	1,002	1,453
"	B	4,202	882	1,313	4,463	1,116	1,621	5,142	1,286	1,879
"	C	4,202	1,093	1,631	4,463	1,339	1,949	5,142	1,748	2,531
Blair	A	2,332	361	543	2,449	429	628	2,468	481	707
"	B	2,332	490	732	2,449	612	892	2,468	617	914
"	C	2,332	606	909	2,449	735	1,074	2,468	839	1,231

APPENDIX D (cont.)

		1966			1970			1974		
County and Formula		H. S. Grads	Full-Time Freshmen	Total Full-Time	H. S. Grads	Full-Time Freshmen	Total Full-Time	H. S. Grads	Full-Time Freshmen	Total Full-Time
Bradford	A	1,024	159	237	1,063	186	186	1,222	238	349
"	B	1,024	215	309	1,063	266	391	1,222	306	453
"	C	1,024	266	397	1,063	319	469	1,222	415	608
Bucks	A	5,308	823	1,228	6,695	1,172	1,695	7,925	1,545	2,248
"	B	5,308	1,115	1,656	6,695	1,674	2,412	7,925	1,981	2,893
"	C	5,308	1,380	2,056	6,695	2,009	2,901	7,925	2,695	3,899
Butler	A	1,925	298	444	2,246	393	568	2,395	467	683
"	B	1,925	404	599	2,246	562	809	2,395	599	883
"	C	1,925	501	745	2,246	674	972	2,395	814	1,189
Cambria	A	3,437	533	791	3,673	643	957	3,713	724	1,061
"	B	3,437	722	1,066	3,673	918	1,362	3,713	928	1,371
"	C	3,437	894	1,324	3,673	1,102	1,638	3,713	1,262	1,847
Cameron	A	145	22	33	127	22	35	137	27	41
"	B	145	30	45	127	32	50	137	34	52
"	C	145	38	56	127	38	59	137	47	70
Carbon	A	673	104	155	680	119	170	699	136	198
"	B	673	141	209	680	170	242	699	175	256
"	C	673	175	260	680	204	291	699	238	346
Centre	A	994	154	228	1,133	198	289	1,290	252	391
"	B	994	209	307	1,133	283	411	1,290	323	480
"	C	994	258	381	1,133	340	494	1,290	439	646
Chester	A	3,690	572	846	3,983	697	1,016	4,918	959	1,406
"	B	3,690	775	1,140	3,983	996	1,447	4,918	1,230	1,818
"	C	3,690	959	1,416	3,983	1,195	1,740	4,918	1,672	2,449

APPENDIX D (cont.)

County and Formula		1966			1970			1974		
		H. S. Grads	Full-Time Freshmen	Total Full-Time	H. S. Grads	Full-Time Freshmen	Total Full-Time	H. S. Grads	Full-Time Freshmen	Total Full-Time
Clarion	A	664	103	156	670	117	175	708	138	208
"	B	664	140	211	670	168	252	708	177	266
"	C	644	211	261	670	201	300	708	241	362
Clearfield	A	1,424	221	333	1,453	254	377	1,479	288	423
"	B	1,424	299	449	1,453	363	537	1,479	370	548
"	C	1,424	370	557	1,453	436	646	1,479	503	738
Clinton	A	643	100	153	548	96	146	615	120	176
"	B	643	135	206	548	137	207	615	154	228
"	C	643	167	255	548	164	248	615	209	307
Columbia	A	829	128	195	988	173	249	960	187	282
"	B	829	174	264	988	247	371	960	240	360
"	C	829	216	327	988	296	425	960	326	491
Crawford	A	1,303	202	305	1,395	244	360	1,385	270	397
"	B	1,303	274	411	1,395	349	512	1,385	346	513
"	C	1,303	339	510	1,395	419	616	1,385	471	691
Cumberland	A	2,385	370	543	2,700	473	699	3,118	608	888
"	B	2,385	501	732	2,700	675	994	3,118	780	1,149
"	C	2,385	620	909	2,700	810	1,196	3,118	1,060	1,547
Dauphin	A	3,530	547	821	4,125	722	1,045	4,552	888	1,309
"	B	3,530	741	1,106	4,125	1,031	1,487	4,552	1,138	1,692
"	C	3,530	918	1,374	4,125	1,238	1,788	4,552	1,548	2,279
Delaware	A	9,265	1,436	2,140	9,750	1,706	2,513	10,654	2,076	3,067
"	B	9,265	1,946	2,895	9,750	2,438	3,568	10,654	2,664	3,968
"	C	9,265	2,409	3,583	9,750	2,925	4,301	10,654	3,622	5,343

APPENDIX D (cont.)

County and Formula		1966			1970			1974		
		H. S. Grads	Full-Time Freshmen	Total Full-Time	H. S. Grads	Full-Time Freshmen	Total Full-Time	H. S. Grads	Full-Time Freshmen	Total Full-Time
Elk	A	630	98	146	668	117	172	683	133	197
"	B	630	132	196	668	167	244	683	170	255
"	C	630	164	244	668	200	293	683	232	344
Erie	A	4,463	692	1,027	4,748	831	1,220	5,144	1,003	1,471
"	B	4,463	937	1,384	4,748	1,187	1,736	5,144	1,286	1,902
"	C	4,463	1,160	1,719	4,748	1,424	2,088	5,144	1,749	2,562
Fayette	A	2,573	399	586	2,311	404	596	2,316	452	662
"	B	2,573	540	807	2,311	578	849	2,316	579	857
"	C	2,573	669	1,002	2,311	693	1,021	2,316	787	1,154
Forest	A	113	18	26	114	20	27	108	21	32
"	B	113	24	35	114	29	39	108	27	41
"	C	113	29	42	114	34	46	108	37	55
Franklin	A	1,737	269	400	1,964	344	501	2,004	391	577
"	B	1,737	365	539	1,964	491	712	2,004	501	746
"	C	1,737	452	669	1,964	589	856	2,004	681	1,004
Fulton	A	168	26	39	185	32	46	190	37	54
"	B	168	35	52	185	46	65	190	48	71
"	C	168	44	66	185	56	79	190	65	95
Greene	A	647	100	150	666	117	171	641	125	182
"	B	647	136	203	666	167	243	641	160	236
"	C	647	168	252	666	200	292	641	209	309
Huntingdon	A	682	106	164	772	135	197	707	138	207
"	B	682	143	219	772	193	280	707	177	268
"	C	682	177	273	772	232	337	707	240	360

APPENDIX D (cont.)

County and Formula		1966			1970			1974		
		H. S. Grads	Full-Time Freshmen	Total Full-Time	H. S. Grads	Full-Time Freshmen	Total Full-Time	H. S. Grads	Full-Time Freshmen	Total Full-Time
Indiana	A	1,306	202	303	1,325	232	355	1,406	274	414
"	B	1,306	274	409	1,325	331	505	1,406	352	536
"	C	1,306	340	509	1,325	398	608	1,406	478	721
Jefferson	A	727	113	176	686	120	179	740	144	213
"	B	727	153	237	686	172	256	740	185	275
"	C	727	189	294	686	206	307	740	256	375
Juniata	A	242	38	58	294	51	75	311	61	89
"	B	242	51	77	294	74	107	311	78	117
"	C	242	63	95	294	88	120	311	106	154
Lackawanna	A	3,688	572	835	3,610	632	956	3,708	723	1,071
"	B	3,688	774	1,109	3,610	903	1,360	3,708	927	1,385
"	C	3,688	959	1,397	3,610	1,083	1,635	3,708	1,261	1,866
Lancaster	A	4,210	653	965	4,688	820	1,205	5,473	1,067	1,566
"	B	4,210	884	1,300	4,688	1,172	1,715	5,473	1,368	2,024
"	C	4,210	1,095	1,614	4,688	1,406	2,062	5,473	1,861	2,727
Lawrence	A	1,864	289	435	2,021	354	531	2,084	406	609
"	B	1,864	391	585	2,021	505	746	2,084	521	785
"	C	1,864	484	726	2,021	606	898	2,084	709	1,058
Lebanon	A	1,323	205	314	1,467	257	376	1,532	299	446
"	B	1,323	278	423	1,467	367	535	1,532	383	582
"	C	1,323	344	530	1,467	440	642	1,532	521	776
Lehigh	A	3,120	484	730	3,060	536	793	3,641	710	1,024
"	B	3,120	655	982	3,060	765	1,128	3,641	910	1,323
"	C	3,120	811	1,220	3,060	918	1,356	3,641	1,238	1,783

APPENDIX D (cont.)

County and Formula		1966 H. S. Grads	1966 Full-Time Freshmen	1966 Total Full-Time	1970 H. S. Grads	1970 Full-Time Freshmen	1970 Total Full-Time	1974 H. S. Grads	1974 Full-Time Freshmen	1974 Total Full-Time
Luzerne	A	5,302	822	1,236	5,086	890	1,333	4,952	966	1,434
"	B	5,302	1,113	1,665	5,086	1,272	1,897	4,952	1,238	1,853
"	C	5,302	1,379	2,069	5,086	1,526	2,281	4,952	1,684	2,496
Lycoming	A	1,570	243	367	1,895	332	477	2,113	412	607
"	B	1,570	330	496	1,895	469	674	2,113	528	785
"	C	1,570	408	615	1,895	569	816	2,113	718	1,057
McKean	A	957	148	219	999	175	256	1,050	205	301
"	B	957	201	296	999	250	365	1,050	263	389
"	C	957	249	368	999	300	438	1,050	357	523
Mercer	A	2,071	321	479	2,228	390	567	2,293	447	651
"	B	2,071	435	646	2,228	557	807	2,293	573	841
"	C	2,071	538	802	2,228	668	970	2,293	780	1,134
Mifflin	A	662	103	158	676	118	175	693	135	200
"	B	662	139	213	676	169	249	693	173	260
"	C	662	172	264	676	203	300	693	236	349
Monroe	A	505	78	119	640	112	160	653	127	190
"	B	505	106	160	640	160	227	653	163	246
"	C	505	131	199	640	192	273	653	222	332
Montgomery	A	9,162	1,420	2,124	10,833	1,896	2,783	12,771	2,490	3,628
"	B	9,162	1,924	2,862	10,833	2,708	3,961	12,771	3,193	4,690
"	C	9,162	2,382	3,555	10,833	3,250	4,764	12,771	4,342	6,318
Montour	A	277	41	62	330	58	84	339	66	101
"	B	277	56	84	330	83	119	339	85	131
"	C	277	69	104	330	99	143	339	115	175

APPENDIX D (cont.)

		1966			1970			1974		
County and Formula		H. S. Grads	Full-Time Freshmen	Total Full-Time	H. S. Grads	Full-Time Freshmen	Total Full-Time	H. S. Grads	Full-Time Freshmen	Total Full-Time
Northampton	A	3,714	576	846	3,695	647	949	3,990	778	1,154
"	B	3,714	780	1,140	3,695	924	1,350	3,990	998	1,493
"	C	3,714	966	1,416	3,695	1,109	1,624	3,990	1,357	2,010
Northumbrlnd	A	1,642	255	387	1,731	303	444	1,640	320	479
"	B	1,642	345	521	1,731	433	632	1,640	410	619
"	C	1,642	427	647	1,731	519	760	1,640	558	834
Perry	A	497	77	118	550	96	139	574	112	170
"	B	497	104	159	550	138	199	574	144	220
"	C	497	129	197	550	165	239	574	195	296
Philadelphia	A	18,751	2,906	4,718	18,389	3,218	4,738	20,792	4,054	5,803
"	B	18,751	3,938	6,354	18,389	4,597	6,743	20,792	5,198	7,499
"	C	18,751	4,875	7,894	18,389	5,517	8,110	20,792	7,069	10,106
Pike	A	101	16	24	112	20	29	81	16	23
"	B	101	21	31	112	28	40	81	20	29
"	C	101	26	39	112	34	49	81	28	40
Potter	A	267	41	61	285	50	70	282	55	81
"	B	267	56	83	285	71	100	282	71	105
"	C	267	69	103	285	86	121	282	96	141
Schuylkill	A	2,555	396	201	2,579	451	660	2,613	510	761
"	B	2,555	537	805	2,579	648	943	2,613	653	983
"	C	2,555	664	999	2,579	774	1,131	2,613	888	1,324
Snyder	A	371	58	84	361	63	94	439	86	124
"	B	371	78	113	361	90	134	439	110	160
"	C	371	96	140	361	108	161	439	149	215

APPENDIX D (cont.)

County and Formula		1966 H. S. Grads	1966 Full-Time Freshmen	1966 Total Full-Time	1970 H. S. Grads	1970 Full-Time Freshmen	1970 Total Full-Time	1974 H. S. Grads	1974 Full-Time Freshmen	1974 Total Full-Time
Somerset	A	1,371	213	319	1,403	246	360	1,340	261	382
"	B	1,371	288	429	1,403	351	512	1,340	335	495
"	C	1,371	356	533	1,403	421	620	1,340	456	667
Sullivan	A	105	16	25	140	25	34	123	24	34
"	B	105	22	33	140	35	47	123	31	45
"	C	105	27	41	140	42	57	123	42	60
Susquehanna	A	624	97	146	629	110	159	685	134	197
"	B	624	[illegible]	196	629	159	228	685	171	254
"	C	624	162	243	629	189	273	685	233	342
Tioga	A	565	88	131	700	123	175	736	144	212
"	B	565	119	176	700	175	248	736	184	273
"	C	565	147	218	700	210	298	736	250	368
Union	A	282	44	67	319	56	86	375	73	107
"	B	282	59	89	319	80	122	375	94	139
"	C	282	73	111	319	96	147	375	128	187
Venango	A	859	133	200	1,036	181	270	1,061	207	310
"	B	859	180	269	1,036	259	384	1,061	265	401
"	C	859	223	334	1,036	311	462	1,061	361	540
Warren	A	647	100	152	728	127	189	793	155	224
"	B	647	136	205	728	182	270	793	198	289
"	C	647	168	254	728	218	324	793	270	390
Washington	A	3,592	557	830	3,747	656	967	3,890	759	1,119
"	B	3,592	754	1,117	3,747	937	1,377	3,890	973	1,447
"	C	3,592	934	1,388	3,747	1,124	1,665	3,890	1,323	1,985

APPENDIX D (cont.)

County and Formula		1966 H. S. Grads	1966 Full-Time Freshmen	1966 Total Full-Time	1970 H. S. Grads	1970 Full-Time Freshmen	1970 Total Full-Time	1974 H. S. Grads	1974 Full-Time Freshmen	1974 Total Full-Time
Wayne	A	322	50	76	394	69	101	451	88	123
"	B	322	68	103	394	99	145	451	113	161
"	C	322	84	128	394	118	173	451	153	216
Westmoreland	A	6,106	946	1,419	7,004	1,226	1,765	7,127	1,390	2,033
"	B	6,106	1,282	1,912	7,004	1,751	2,511	7,127	1,782	2,638
"	C	6,106	1,588	2,376	7,004	2,101	3,020	7,127	2,423	3,540
Wyoming	A	287	44	66	319	56	86	348	68	104
"	B	287	60	89	319	80	122	348	87	134
"	C	287	75	112	319	96	146	348	118	180
York	A	3,836	595	886	4,315	755	1,110	4,903	956	1,416
"	B	3,836	806	1,194	4,315	1,078	1,580	4,903	1,226	1,832
"	C	3,836	997	1,482	4,315	1,295	1,901	4,903	1,666	2,465

APPENDIX E

PROJECTION OF FULL-TIME, PART-TIME, AND TOTAL ENROLLMENT POTENTIALS FOR COMMUNITY COLLEGES, 1966 THROUGH 1974, BASED ON FORMULAS "A", "B" AND "C"

Sources and Explantory Notes

A number of factors influence part-time enrollments. Among others, the location of the community college, tuition charges, and the character and variety of programs and courses offered by the college. Adult education -- the most rapidly growing segment of higher education -- career courses, and other opportunities to satisfy community and personal needs and aspirations may substantially increase part-time enrollments. In recent years community college part-time enrollments for the country as a whole have been equivalent to full-time enrollments, although this ratio varies among the states.

In the following table it is assumed that Pennsylvania's part-time community college enrollments will by 1970 be equal to its full-time enrollments, as given in Appendix D. It is further assumed that the ratio of part-time to full-time students will rise gradually, as follows: 1965, 20%; 1966, 40%; 1967, 60%; 1968, 80%; 1969 and thereafter, 100%.

These figures apply generally to the counties. However, where several counties cooperatively sponsor a community college, it may be that the county in which the college is located will achieve the maximum ratio while the cooperating counties may or may not achieve it. Since this can not be determined in advance, the following table is based on the ratios outlined above. Actual ratios may vary somewhat in specific cases; these are discussed in Section II, dealing with the establishment of the separate community college areas, or districts.

APPENDIX E

PROJECTION OF FULL-TIME, PART-TIME, AND TOTAL ENROLLMENT POTENTIALS FOR COMMUNITY COLLEGES, 1966 THROUGH 1974, BASED ON FORMULAS "A", "B" AND "C"

County and Formula		1966			1970			1974		
		F-T Enroll.	P-T Enroll.	Total F-T & P-T Enroll.	F-T Enroll.	P-T Enroll.	Total F-T & P-T Enroll.	F-T Enroll.	P-T Enroll.	Total F-T & P-T Enroll.
Adams	A	207	83	290	257	257	514	300	300	600
"	B	278	111	389	366	366	732	389	389	778
"	C	345	138	483	440	440	880	523	523	1,046
Allegheny	A	4,819	1,928	6,747	6,025	6,025	12,050	7,464	7,464	14,928
"	B	6,495	2,598	9,093	8,569	8,569	17,138	9,650	9,650	19,300
"	C	8,067	3,227	11,294	10,312	10,312	20,624	12,999	12,999	25,998
Armstrong	A	309	124	433	364	364	728	417	417	834
"	B	415	166	581	519	519	1,038	539	539	1,078
"	C	516	206	722	623	623	1,246	725	725	1,450
Beaver	A	798	319	1,117	1,020	1,020	2,040	1,171	1,171	2,342
"	B	1,076	430	1,506	1,453	1,453	2,906	1,513	1,513	3,026
"	C	1,336	534	1,870	1,746	1,746	3,492	2,039	2,039	4,078
Bedford	A	167	67	234	213	213	426	267	267	534
"	B	225	90	315	305	305	610	342	342	684
"	C	279	112	391	356	356	712	451	451	902
Berks	A	974	390	1,364	1,139	1,139	2,278	1,453	1,453	2,906
"	B	1,313	525	1,838	1,621	1,621	3,242	1,879	1,879	3,758
"	C	1,631	652	2,283	1,949	1,949	3,898	2,531	2,531	5,062
Blair	A	543	217	760	628	628	1,256	707	707	1,414
"	B	732	293	1,025	892	892	1,784	914	914	1,828
"	C	909	364	1,273	1,074	1,074	2,148	1,231	1,231	2,462

APPENDIX E (cont.)

County and Formula		1966			1970			1974		
		F-T Enroll.	P-T Enroll.	Total F-T & P-T Enroll.	F-T Enroll.	P-T Enroll.	Total F-T & P-T Enroll.	F-T Enroll.	P-T Enroll.	Total F-T & P-T Enroll.
Bradford	A	237	95	332	274	274	548	349	349	698
"	B	309	124	433	391	391	782	453	453	906
"	C	397	159	556	469	469	938	608	608	1,216
Bucks	A	1,228	491	1,719	1,695	1,695	3,390	2,248	2,248	4,496
"	B	1,656	662	2,318	2,412	2,412	4,824	2,893	2,893	5,786
"	C	2,056	822	2,878	2,901	2,901	5,802	3,899	3,899	7,798
Butler	A	444	178	622	568	568	1,136	683	683	1,366
"	B	599	240	839	809	809	1,618	883	883	1,766
"	C	745	298	1,043	972	972	1,944	1,189	1,189	2,378
Cambria	A	791	316	1,107	957	957	1,914	1,061	1,061	2,122
"	B	1,066	426	1,492	1,362	1,362	2,724	1,371	1,371	2,742
"	C	1,324	530	1,854	1,638	1,638	3,276	1,847	1,847	3,694
Cameron	A	33	13	46	35	35	70	41	41	82
"	B	45	18	63	50	50	100	52	52	104
"	C	56	22	78	59	59	118	70	70	140
Carbon	A	155	62	217	170	170	340	198	198	396
"	B	209	84	293	242	242	484	256	256	512
"	C	260	104	364	291	291	582	346	346	692
Centre	A	228	91	319	289	289	578	391	391	782
"	B	307	123	430	411	411	822	480	480	960
"	C	381	152	533	494	494	988	646	646	1,292
Chester	A	846	338	1,184	1,016	1,016	2,032	1,406	1,406	2,812
"	B	1,140	456	1,596	1,447	1,447	2,894	1,818	1,818	3,636
"	C	1,416	566	1,982	1,740	1,740	3,480	2,449	2,449	4,898

APPENDIX E (cont.)

County and Formula		1966			1970			1974		
		F-T Enroll.	P-T Enroll.	Total F-T & P-T Enroll.	F-T Enroll.	P-T Enroll.	Total F-T & P-T Enroll.	F-T Enroll.	P-T Enroll.	Total F-T & P-T Enroll.
Clarion	A	156	62	218	175	175	350	208	208	416
"	B	211	84	295	252	252	504	266	266	532
"	C	261	104	365	300	300	600	362	362	724
Clearfield	A	333	133	466	377	377	754	423	423	846
"	B	449	180	629	537	537	1,074	548	548	1,096
"	C	557	223	780	646	646	1,292	738	738	1,476
Clinton	A	153	61	214	146	146	292	176	176	352
"	B	206	82	288	207	207	414	228	228	456
"	C	255	102	357	248	248	496	307	307	614
Columbia	A	195	78	273	249	249	498	282	282	564
"	B	264	106	370	371	371	742	360	360	720
"	C	327	131	458	425	425	850	491	491	982
Crawford	A	305	122	427	360	360	720	397	397	794
"	B	411	164	575	512	512	1,024	513	513	1,026
"	C	510	204	714	616	616	1,232	691	691	1,382
Cumberland	A	543	217	760	699	699	1,398	888	888	1,776
"	B	732	293	1,025	994	994	1,988	1,149	1,149	2,298
"	C	909	364	1,273	1,196	1,196	2,392	1,547	1,547	3,094
Dauphin	A	821	328	1,149	1,045	1,045	2,090	1,309	1,309	2,618
"	B	1,106	442	1,548	1,487	1,487	2,974	1,692	1,692	3,384
"	C	1,374	550	1,924	1,788	1,788	3,576	2,279	2,279	4,558
Delaware	A	2,140	856	2,996	2,513	2,513	5,026	3,067	3,067	6,134
"	B	2,895	1,158	4,053	3,568	3,568	7,136	3,968	3,968	7,936
"	C	3,583	1,433	5,016	4,301	4,301	8,602	5,343	5,343	10,686

APPENDIX E (cont.)

County and Formula		1966			1970			1974		
		F-T Enroll.	P-T Enroll.	Total F-T & P-T Enroll.	F-T Enroll.	P-T Enroll.	Total F-T & P-T Enroll.	F-T Enroll.	P-T Enroll.	Total F-T & P-T Enroll.
Elk	A	146	58	204	172	172	344	197	197	394
"	B	196	78	274	244	244	488	255	255	510
"	C	244	98	342	293	293	586	344	344	688
Erie	A	1,027	411	1,438	1,220	1,220	2,440	1,471	1,471	2,942
"	B	1,384	554	1,938	1,736	1,736	3,472	1,902	1,902	3,804
"	C	1,719	688	2,407	2,088	2,088	4,176	2,562	2,562	5,124
Fayette	A	586	234	820	596	596	1,192	663	663	1,326
"	B	807	323	1,130	849	849	1,698	857	857	1,714
"	C	1,002	401	1,403	1,021	1,021	2,042	1,154	1,154	2,308
Forest	A	26	10	36	27	27	54	32	32	64
"	B	35	14	49	39	39	78	41	41	82
"	C	42	17	59	46	46	92	55	55	110
Franklin	A	400	160	560	501	501	1,002	577	577	1,154
"	B	539	216	755	712	712	1,424	746	746	1,492
"	C	669	268	937	856	856	1,712	1,004	1,004	2,008
Fulton	A	39	16	55	46	46	92	54	54	108
"	B	52	21	73	65	65	130	71	71	142
"	C	66	26	92	79	79	158	95	95	190
Greene	A	150	60	210	171	171	342	182	182	364
"	B	203	81	284	243	243	486	236	236	472
"	C	252	101	353	292	292	584	309	309	618
Huntingdon	A	164	66	230	197	197	394	207	207	414
"	B	219	88	307	280	280	560	268	268	536
"	C	273	109	382	337	337	674	360	360	720

APPENDIX E (cont.)

County and Formula		1966			1970			1974		
		F-T Enroll.	P-T Enroll.	Total F-T & P-T Enroll.	F-T Enroll.	P-T Enroll.	Total F-T & P-T Enroll.	F-T Enroll.	P-T Enroll.	Total F-T & P-T Enroll.
Indiana	A	303	121	424	355	355	710	414	414	828
"	B	409	164	573	505	505	1,010	536	536	1,072
"	C	509	204	713	608	608	1,216	721	721	1,442
Jefferson	A	176	70	246	179	179	358	213	213	426
"	B	237	95	332	256	256	512	275	275	550
"	C	294	118	412	307	307	614	375	375	750
Juanita	A	58	23	81	75	75	150	89	89	178
"	B	77	31	108	107	107	214	117	117	234
"	C	95	38	133	120	120	240	154	154	308
Lackawanna	A	835	334	1,169	956	956	1,912	1,071	1,071	2,142
"	B	1,109	444	1,553	1,360	1,360	2,720	1,385	1,385	2,770
"	C	1,397	559	1,956	1,635	1,635	3,270	1,866	1,866	3,732
Lancaster	A	965	386	1,351	1,205	1,205	2,410	1,566	1,566	3,132
"	B	1,300	520	1,820	1,715	1,715	3,430	2,024	2,024	4,048
"	C	1,614	646	2,260	2,062	2,062	4,124	2,727	2,727	5,454
Lawrence	A	435	174	609	531	531	1,062	609	609	1,218
"	B	585	234	819	746	746	1,492	785	785	1,570
"	C	726	290	1,016	898	898	1,796	1,058	1,058	2,116
Lebanon	A	314	126	440	376	376	752	446	446	892
"	B	423	169	592	535	535	1,070	582	582	1,164
"	C	530	212	742	642	642	1,284	776	776	1,552
Lehigh	A	730	292	1,022	793	793	1,586	1,024	1,024	2,048
"	B	982	393	1,375	1,128	1,128	2,256	1,323	1,323	2,646
"	C	1,220	488	1,708	1,356	1,356	2,712	1,783	1,783	3,566

APPENDIX E (cont.)

County and	Formula	1966 F-T Enroll.	1966 P-T Enroll.	1966 Total F-T & P-T Enroll.	1970 F-T Enroll.	1970 P-T Enroll.	1970 Total F-T & P-T Enroll.	1974 F-T Enroll.	1974 P-T Enroll.	1974 Total F-T & P-T Enroll.
Luzerne	A	1,236	494	1,730	1,333	1,333	2,666	1,434	1,434	2,868
"	B	1,665	666	2,331	1,897	1,897	3,794	1,853	1,853	3,706
"	C	2,069	828	2,897	2,281	2,281	4,562	2,496	2,496	4,992
Lycoming	A	367	147	514	477	477	954	607	607	1,214
"	B	496	198	694	674	674	1,348	785	785	1,570
"	C	615	246	861	816	816	1,632	1,057	1,057	2,114
McKean	A	219	88	307	256	256	512	301	301	602
"	B	296	118	414	365	365	730	389	389	778
"	C	368	147	515	438	438	876	523	523	1,046
Mercer	A	479	192	671	567	567	1,134	651	651	1,302
"	B	646	258	904	807	807	1,614	841	841	1,682
"	C	802	321	1,123	970	970	1,940	1,134	1,134	2,268
Mifflin	A	158	63	221	175	175	350	200	200	400
"	B	213	85	298	249	249	498	260	260	520
"	C	264	106	370	300	300	600	349	349	698
Monroe	A	119	48	167	160	160	320	190	190	380
"	B	160	64	224	227	227	454	246	246	492
"	C	199	80	279	273	273	546	332	332	664
Montgomery	A	2,124	850	2,974	2,783	2,783	5,556	3,628	3,628	7,256
"	B	2,862	1,145	4,007	3,961	3,961	7,922	4,690	4,690	9,380
"	C	3,555	1,422	4,977	4,764	4,764	9,528	6,318	6,318	12,636
Montour	A	62	25	87	84	84	168	101	101	202
"	B	84	34	118	119	119	238	131	131	262
"	C	104	42	146	143	143	286	175	175	350

APPENDIX E (cont.)

County and Formula		1966			1970			1974		
		F-T Enroll.	P-T Enroll.	Total F-T & P-T Enroll.	F-T Enroll.	P-T Enroll.	Total F-T & P-T Enroll.	F-T Enroll.	P-T Enroll.	Total F-T & P-T Enroll.
Northampton	A	846	338	1,184	949	949	1,898	1,154	1,154	2,308
"	B	1,140	456	1,596	1,350	1,350	2,700	1,493	1,493	2,986
"	C	1,416	566	1,982	1,624	1,624	3,248	2,010	2,010	4,020
Northumbrlnd	A	387	155	542	444	444	888	479	479	958
"	B	521	208	729	632	632	1,264	619	619	1,238
"	C	647	259	906	760	760	1,520	834	834	1,668
Perry	A	118	47	165	139	139	278	170	170	340
"	B	159	64	223	199	199	398	220	220	440
"	C	197	79	276	239	239	478	296	296	592
Philadelphia	A	4,718	1,887	6,605	4,738	4,738	9,476	5,803	5,803	11,606
"	B	6,354	2,542	8,896	6,743	6,743	13,486	7,499	7,499	14,998
"	C	7,894	3,158	11,052	8,110	8,110	16,220	10,106	10,106	20,212
Pike	A	24	9	34	29	29	58	23	23	46
"	B	31	12	43	40	40	80	29	29	58
"	C	39	16	55	49	49	98	40	40	80
Potter	A	61	24	85	70	70	140	81	81	162
"	B	83	33	116	100	100	200	105	105	210
"	C	103	41	144	121	121	242	141	141	282
Schuylkill	A	201	80	281	660	660	1,320	761	761	1,522
"	B	805	322	1,127	943	943	1,886	983	983	1,966
"	C	999	400	1,399	1,131	1,131	2,262	1,324	1,324	2,648
Snyder	A	84	34	118	94	94	188	124	124	248
"	B	113	45	158	134	134	268	160	160	320
"	C	140	56	196	161	161	322	215	215	430

APPENDIX E (cont.)

County and Formula		1966			1970			1974		
		F-T Enroll.	P-T Enroll.	Total F-T & P-T Enroll.	F-T Enroll.	P-T Enroll.	Total F-T & P-T Enroll.	F-T Enroll.	P-T Enroll.	Total F-T & P-T Enroll.
Somerset	A	319	128	447	360	360	720	382	382	764
"	B	429	172	601	512	512	1,024	495	495	990
"	C	533	213	746	620	620	1,240	667	667	1,334
Sullivan	A	25	10	35	34	34	68	34	34	68
"	B	33	13	46	47	47	94	45	45	90
"	C	41	16	57	57	57	114	60	60	120
Susquehanna	A	146	58	204	159	159	318	197	197	394
"	B	196	78	274	228	228	456	254	254	508
"	C	243	97	340	273	273	546	342	342	684
Tioga	A	131	52	183	175	175	350	212	212	424
"	B	176	70	246	248	248	496	273	273	546
"	C	218	87	305	298	298	596	368	368	736
Union	A	67	27	94	86	86	172	107	107	214
"	B	89	36	125	122	122	244	139	139	278
"	C	111	44	155	147	147	294	187	187	374
Venango	A	200	80	280	270	270	540	310	310	620
"	B	269	108	377	384	384	768	401	401	802
"	C	334	134	468	462	462	924	540	540	1,080
Warren	A	152	61	213	189	189	378	224	224	448
"	B	205	82	287	270	270	540	289	289	578
"	C	254	102	356	324	324	648	390	390	780
Washington	A	830	332	1,162	967	967	1,934	1,119	1,119	2,238
"	B	1,117	447	1,564	1,377	1,377	2,754	1,447	1,447	2,894
"	C	1,388	555	1,943	1,665	1,665	3,330	1,985	1,985	3,970

APPENDIX E (cont.)

County and Formula		1966			1970			1974		
		F-T Enroll.	P-T Enroll.	Total F-T & P-T Enroll.	F-T Enroll.	P-T Enroll.	Total F-T & P-T Enroll.	F-T Enroll.	P-T Enroll.	Total F-T & P-T Enroll.
Wayne	A	76	30	106	101	101	202	123	123	246
"	B	103	41	144	145	145	290	161	161	322
"	C	128	51	179	173	173	346	216	216	432
Westmoreland	A	1,419	568	1,987	1,765	1,765	3,530	2,033	2,033	4,066
"	B	1,912	765	2,677	2,511	2,511	5,022	2,638	2,638	5,276
"	C	2,376	950	3,326	3,020	3,020	6,040	3,540	3,540	7,080
Wyoming	A	66	26	92	86	86	172	104	104	208
"	B	89	36	125	122	122	244	134	134	268
"	C	112	45	157	146	146	292	180	180	360
York	A	886	354	1,240	1,110	1,110	2,220	1,416	1,416	2,832
"	B	1,194	478	1,672	1,580	1,580	3,160	1,832	1,832	3,664
"	C	1,482	593	2,075	1,901	1,901	3,802	2,465	2,465	4,930

APPENDIX F

NUMBER AND PERCENT OF 1964 HIGH SCHOOL GRADUATES WHO ENTERED COLLEGES AND UNIVERSITIES AND OTHER POST-SECONDARY INSTITUTIONS

County (1)	H. S. Grads. 1964 (2)	No. Who Entered Col. or Un. (3)	% Who Entered Col. or Un. (4)	No. Who Entered Other Post-Sec. Insts. (5)	% Who Entered Other Post-Sec. Insts. (6)
Adams	712	208	29.2%	96	13.4%
Allegheny	22,377	8,882	39.7	3,384	15.1
Armstrong	1,117	313	28.0	187	16.7
Beaver	3,111	1,151	37.0	514	16.5
Bedford	659	116	17.6	112	17.0
Berks	3,700	1,148	31.0	621	16.8
Blair	2,128	455	21.4	334	15.7
Bradford	860	205	23.8	186	21.6
Bucks	4,340	1,755	40.4	571	13.2
Butler	1,724	509	29.5	384	22.3
Cambria	3,028	684	22.6	427	14.1
Cameron	126	45	36.0	24	19.0
Carbon	622	181	29.1	166	26.7
Centre	858	297	34.6	98	11.4
Chester	3,259	1,406	43.1	462	14.2
Clarion	633	184	29.1	81	12.8
Clearfield	1,330	285	21.4	181	13.6
Clinton	564	143	25.4	102	18.1
Columbia	793	230	29.0	125	15.8
Crawford	1,124	356	31.7	125	11.1
Cumberland	1,998	779	39.0	281	14.1
Dauphin	3,158	1,076	34.1	709	22.5
Delaware	8,028	3,136	39.1	1,214	15.1
Elk	489	113	23.1	52	10.6
Erie	3,742	1,486	39.7	542	14.5
Fayette	2,266	488	21.5	238	10.5
Forest	70	17	24.3	15	21.4
Franklin	1,450	569	39.2	168	11.6
Fulton	155	29	18.7	38	24.5
Greene	608	141	23.2	134	22.0
Huntingdon	606	155	25.6	121	20.0
Indiana	1,266	319	25.2	178	14.1
Jefferson	603	182	30.2	86	14.3
Juniata	208	45	21.6	42	20.2
Lackawanna	3,360	1,063	31.6	556	16.5

APPENDIX F - NUMBER AND PERCENT OF 1964 HIGH SCHOOL GRADUATES WHO ENTERED COLLEGES AND UNIVERSITIES AND OTHER POST-SECONDARY INSTITUTIONS (cont.)

County	H. S. Grads 1964	No. Who Entered Col. or Un.	% Who Entered Col. or Un.	No. Who Entered Other Post-Sec. Insts.	% Who Entered Other Post-Sec. Insts.
Lancaster	3,586	1,147	32.0	513	14.3
Lawrence	1,715	692	40.3	270	15.7
Lebanon	1,258	310	24.7	158	12.6
Lehigh	2,923	915	31.3	464	15.9
Luzerne	5,273	1,603	30.4	1,105	21.0
Lycoming	1,357	375	27.6	216	15.9
McKean	847	284	33.5	87	10.3
Mercer	1,858	718	38.6	268	14.4
Mifflin	583	158	27.1	87	14.9
Monroe	511	185	36.2	84	16.4
Montgomery	8,228	3,908	47.5	1,110	13.5
Montour	197	55	27.9	16	8.1
Northampton	3,101	1,006	32.4	534	17.2
Northumberland	1,561	322	20.6	252	16.1
Perry	436	110	25.2	72	16.5
Philadelphia	18,480	5,910	32.0	2,751	14.9
Pike	70	27	38.6	2	2.9
Potter	260	62	23.8	54	20.8
Schuylkill	2,466	572	23.2	560	22.7
Snyder	367	67	18.3	46	12.5
Somerset	1,268	276	21.8	216	17.0
Sullivan	85	18	21.2	12	14.1
Susquehanna	538	151	28.1	99	18.4
Tioga	450	132	29.3	98	21.8
Union	241	59	24.5	47	19.5
Venango	847	261	30.8	131	15.5
Warren	601	201	33.4	101	16.8
Washington	3,277	1,105	33.7	604	18.4
Wayne	367	112	30.5	75	20.4
Westmoreland	5,166	1,708	33.1	960	18.6
Wyoming	269	63	23.4	58	21.7
York	3,267	1,163	35.6	466	14.3

Sources: Column (2) -- public school graduates taken from "Our Schools Today," Pennsylvania Department of Public Instruction, Jan. 21, 1965, Vol. 4, No. 1 -- private school graduates estimated from data in "Our Schools Today," May 4, 1964, Vol. 3, No. 4; columns (3) and (5) taken from same sources; columns (4) and (6) calculated from columns (3) and (5).

APPENDIX G

ABILITY OF COUNTIES TO FINANCE COMMUNITY COLLEGES

Sources and Explanatory Notes

The projected enrollments shown are those of full-time students estimated for 1970 by Formula "B" (from Appendix D).

The projected budgets have been calculated on the basis of $850 per full-time student for operating expenses; capital outlay has been based on the estimate of $4,000.00 per student for the construction of a campus with complete educational facilities, including equipment. Reduced to formula, these factors result in a figure of $383.33 per student in full-time attendance for establishing the local college's annual budget, based on the assumption that the community college will finance one-half of the capital outlay and one-third of the operating budget. For capital outlay it has been further assumed that $50,000 a year amortization will carry each $1,000,000 of outlay.

Market valuations have been estimated for 1965 by adding 8.16% to the 1963 figure, the most recent available from the Pennsylvania State Tax Equalization Board. The 8.16% for two years is based on the State's recent history of an increase of approximately 4% per year. It is realized that counties will vary somewhat with respect to economic growth but since our purpose here is merely to estimate financial feasibility, we did not feel it was necessary to calculate each county's valuation on an adjusted basis. However, in situation's where the resulting millage rate is relatively high, in our analyses of potential districts, we have referred back to the county's valuation history.

Assessed valuations were estimated by using the same procedure and source as noted above for market valuations.

APPENDIX G

ABILITY OF COUNTIES TO FINANCE COMMUNITY COLLEGES

County	Projected Enrollment 1970	Projected Budget	Estimated Market Valuation (in thousands)	Millage on Market Valuation	Estimated Assessed Valuation (in thousands)	Tax on Assessed Valuation
Adams	366	$ 140,500	$ 157,896	.9	$ 36,916	3.8
Allegheny	8,569	3,285,000	7,101,548	.5	3,619,434	.9
Armstrong	519	199,000	214,389	.9	74,774	2.7
Beaver	1,453	557,000	829,682	.7	297,834	1.9
Bedford	305	117,000	106,949	1.0	27,071	4.3
Berks	1,621	621,500	1,001,124	.6	356,200	1.7
Blair	892	342,000	341,094	1.0	185,592	1.8
Bradford	391	150,000	122,152	1.2	38,837	3.9
Bucks	2,412	924,500	1,382,049	.7	457,061	2.0
Butler	809	310,000	412,355	.8	148,759	2.1
Cambria	1,362	522,000	507,482	1.0	209,541	2.5
Cameron	50	19,000	24,412	.8	8,225	2.3
Carbon	242	93,000	122,084	.8	49,835	1.9
Centre	411	157,500	219,658	.7	84,182	1.9
Chester	1,447	554,500	985,129	.6	420,517	1.3
Clarion	252	96,500	86,557	1.1	24,504	3.9
Clearfield	537	206,000	183,137	1.1	76,809	2.7
Clinton	207	79,500	82,005	1.0	26,949	3.0
Columbia	371	142,000	145,960	1.0	55,035	2.6
Crawford	512	196,500	228,786	.9	80,410	2.4
Cumberland	994	381,000	499,079	.8	172,374	2.2
Dauphin	1,487	570,000	807,050	.7	279,409	2.0
Delaware	3,568	1,367,500	2,369,689	.6	607,082	2.3
Elk	244	93,500	107,383	.9	23,921	3.9
Erie	1,736	665,500	811,340	.8	307,021	2.2

APPENDIX G - ABILITY OF COUNTIES TO FINANCE COMMUNITY COLLEGES (cont.)

County	Projected Enrollment 1970	Projected Budget	Estimated Market Valuation (in thousands)	Millage on Market Valuation	Estimated Assessed Valuation (in thousands)	Tax on Assessed Valuation
Fayette	849	$ 325,500	$1,213,885	.3	$ 150,951	2.2
Forest	39	15,000	16,452	.9	4,018	3.7
Franklin	712	273,000	264,777	1.0	124,002	2.2
Fulton	65	25,000	23,623	1.1	9,237	2.7
Greene	243	93,000	163,218	.6	62,758	1.5
Huntingdon	280	107,500	78,926	1.4	34,004	3.2
Indiana	505	193,500	191,004	1.0	73,839	2.6
Jefferson	256	98,000	96,138	1.0	36,419	2.7
Juanita	107	41,000	32,100	1.3	15,830	2.6
Lackawanna	1,360	521,500	549,717	.9	185,402	2.8
Lancaster	1,715	657,500	1,065,240	.6	308,187	2.1
Lawrence	746	286,000	371,156	.8	117,004	2.4
Lebanon	535	205,000	304,355	.7	168,436	1.2
Lehigh	1,128	432,500	859,428	.5	294,558	1.5
Luzerne	1,897	727,000	774,080	.9	256,225	2.8
Lycoming	674	258,500	333,686	.8	114,244	2.3
McKean	365	140,000	187,404	.7	54,672	2.6
Mercer	807	309,500	464,503	.7	159,981	1.9
Mifflin	249	95,500	109,441	.9	23,900	4.0
Monroe	227	87,000	190,196	.5	75,243	1.2
Montgomery	3,961	1,518,500	2,989,670	.5	994,494	1.5
Montour	119	45,500	35,578	1.3	15,805	2.9
Northampton	1,350	517,500	894,740	.6	536,380	1.0
Northumberland	632	242,500	221,353	1.1	67,511	3.6
Perry	199	76,500	57,879	1.3	18,461	4.1

APPENDIX G - ABILITY OF COUNTIES TO FINANCE COMMUNITY COLLEGES (cont.)

County	Projected Enrollment 1970	Projected Budget	Estimated Market Valuation (in thousands)	Millage on Market Valuation	Estimated Assessed Valuation (in thousands)	Tax on Assessed Valuation
Philadelphia	6,743	$2,585,000	$6,493,411	.4	$4,521,125	.6
Pike	40	15,500	79,537	.2	21,953	.7
Potter	100	38,500	33,924	1.1	14,245	2.7
Schuylkill	943	361,500	341,108	1.1	145,686	2.5
Snyder	134	51,500	53,393	1.0	16,873	3.1
Somerset	512	196,500	184,142	1.1	45,336	4.3
Sullivan	47	18,000	14,916	1.2	3,975	4.5
Susquehanna	228	87,500	60,888	1.4	22,048	4.0
Tioga	248	95,000	72,710	1.3	28,347	3.4
Union	122	47,000	60,657	.8	17,110	2.7
Venango	384	147,000	159,215	.9	54,603	2.7
Warren	270	103,500	135,381	.8	82,410	1.3
Washington	1,377	528,000	649,492	.8	219,666	2.4
Wayne	145	55,500	83,397	.7	21,844	2.5
Westmoreland	2,511	962,500	1,270,432	.8	314,977	3.1
Wyoming	122	47,000	43,168	1.1	15,756	3.0
York	1,580	605,500	852,201	.7	205,432	2.9

APPENDIX H

POSSIBLE ADDITIONS TO LOCAL BUDGETS AND COUNTY TAX RATES IF PART-TIME PROGRAMS ARE INSTITUTED

Sources and Explanations

Column (2) - Potential Full-Time Enrollment: Arbitrarily taken as enrollment potential according to Formula "B" for 1970. (See Appendix D).

Column (3) - Local Budget: Estimated at $383.33 per student per year for both operations and capital outlay. (See Appendix G).

Column (4) - Tax Rate: Has been calculated on 1965 estimated assessed valuation. (See Appendix G).

Column (5) - Full-Time Equivalent of Potential Part-Time Enrollment: Districts will vary drastically with respect to part-time enrollment, from none to several time the full-time. Nationally, part-time enrollment has equalled full-time enrollment for several years. So for this Study potential part-time enrollment after 5 years operation has been assumed as equal to the full-time enrollment. (See Appendix E). It has also been assumed on the basis of experience elsewhere, that part-time students will enroll for approximately one-fourth of a full-time load on the average. Based upon this assuption, of the full-time enrollment Column (2), is taken as the "full-time equivalency" of the part-time enrollment.

Column (6) - Potential Addition to Local Budget for Part-Time Enrollment: Calculated as Column (5) time $283.33 (the local district's one-third of the operating cost.) No addition is necessary for capital outlay.

Column (7) - Total Local Budget, Including Part-Time Instruction (where provided): The sum of columns (3) and (6).

Column (8) - Tax Rate: Column (7) divided by the 1965 assessed valuation which is taken from Appendix C.

APPENDIX H

POSSIBLE ADDITIONS TO LOCAL BUDGETS AND COUNTY TAX RATES IF PART-TIME PROGRAMS ARE INSTITUTED

County (1)	Poten. F-T Enr. (2)	Local Budget (3)	Tax Rate (4)	F-T Equiv. (5)	Budget Addition (6)	Total Budget (7)	Tax Rate (8)
Adams	366	$. 140,500	3.8	92	$ 26,000	$ 166,500	4.9
Allegheny	8,569	3,285,000	.9	2,142	607,000	3,892,000	1.2
Armstrong	519	199,000	2.7	130	37,000	236,000	3.4
Beaver	1,453	557,000	1.9	363	102,500	659,500	2.4
Bedford	305	117,000	4.3	76	21,500	138,500	5.5
Berks	1,621	621,500	1.7	405	114,500	736,000	2.2
Blair	892	342,000	1.8	223	63,000	405,000	2.4
Bradford	391	150,000	3.9	98	28,000	178,000	5.0
Bucks	2,412	924,500	2.0	603	171,000	1,095,500	2.6
Butler	809	310,000	2.1	202	57,000	367,000	2.7
Cambria	1,362	522,000	2.5	340	96,500	618,500	3.2
Cameron	50	19,000	2.3	13	3,500	22,500	3.0
Carbon	242	93,000	1.9	61	17,500	110,500	2.4
Centre	411	157,500	1.9	103	29,000	186,500	2.4
Chester	1,447	554,500	1.3	362	102,500	657,000	1.7
Clarion	252	96,500	3.9	63	18,000	114,500	5.1
Clearfield	537	206,000	2.7	134	38,000	244,000	3.4
Clinton	207	79,500	3.0	52	14,500	94,000	3.8
Columbia	371	142,000	2.6	93	26,500	168,500	3.3
Crawford	512	196,500	2.4	128	36,500	233,000	3.1
Cumberland	994	381,000	2.2	249	70,500	451,500	2.8
Dauphin	1,487	570,000	2.0	372	105,500	675,500	2.6
Delaware	3,568	1,367,500	2.3	892	252,500	1,620,000	2.9
Elk	244	93,500	3.9	61	17,500	111,000	5.0
Erie	1,736	665,500	2.2	434	123,000	788,500	2.8
Fayette	849	325,500	2.2	212	60,000	385,500	2.8
Forest	39	15,000	3.7	10	3,000	18,000	4.8
Franklin	712	273,000	2.2	178	50,500	323,500	2.8
Fulton	65	25,000	2.7	16	4,500	29,500	3.5
Greene	243	93,000	1.5	61	17,500	110,500	1.9
Huntingdon	280	107,500	3.2	70	20,000	127,500	4.1
Indiana	505	193,500	2.6	126	35,500	229,000	3.4
Jefferson	256	98,000	2.7	64	18,000	116,000	3.5
Juanita	107	41,000	2.6	27	7,500	48,500	3.3
Lackawanna	1,360	521,500	2.8	340	96,500	618,000	3.6

APPENDIX H - POSSIBLE ADDITIONS TO LOCAL BUDGETS AND COUNTY TAX RATES (cont.)

County (1)	Poten. F-T Enr. (2)	Local Budget (3)	Tax Rate (4)	F-T Equiv. (5)	Budget Addition (6)	Total Budget (7)	Tax Rate (8)
Lancaster	1,715	$ 657,500	2.1	429	$121,500	$ 779,000	2.7
Lawrence	746	286,000	2.4	187	53,000	339,000	3.1
Lebanon	535	205,000	1.2	134	38,000	243,000	1.6
Lehigh	1,128	432,500	1.5	282	80,000	512,500	1.8
Luzerne	1,897	727,000	2.8	474	134,500	861,500	3.6
Lycoming	674	258,500	2.3	169	48,000	306,500	2.9
McKean	365	140,000	2.6	91	26,000	166,000	3.3
Mercer	807	309,500	1.9	202	57,000	366,500	2.5
Mifflin	249	95,500	4.0	62	17,500	113,000	5.1
Monroe	227	87,000	1.2	57	16,000	103,000	1.5
Montgomery	3,961	1,518,500	1.5	990	280,500	1,799,000	2.0
Montour	119	45,500	2.9	30	8,500	54,000	3.7
Northampton	1,350	517,500	1.0	338	96,000	613,500	1.2
Northumbrlnd	632	242,500	3.6	158	45,000	287,500	4.6
Perry	199	76,500	4.1	50	14,000	90,500	5.3
Philadelphia	6,743	2,585,000	.6	1,686	477,500	3,062,500	.7
Pike	40	15,500	.7	10	3,000	18,500	.9
Potter	100	38,500	2.7	25	7,000	45,500	3.5
Schuylkill	943	361,500	2.5	236	67,000	428,500	3.2
Snyder	134	51,500	3.1	34	9,500	61,000	3.9
Somerset	512	196,500	4.3	128	36,500	233,000	5.6
Sullivan	47	18,000	4.5	12	3,500	21,500	5.9
Susquehanna	228	87,500	4.0	57	16,000	103,500	5.1
Tioga	248	95,000	3.4	62	17,500	112,500	4.3
Union	122	47,000	2.7	31	9,000	56,000	3.5
Venango	384	147,000	2.7	96	27,000	174,000	3.5
Warren	270	103,500	1.3	68	19,500	123,000	1.6
Washington	1,377	528,000	2.4	344	97,500	625,500	3.1
Wayne	145	55,500	2.5	36	10,000	65,500	3.2
Westmoreland	2,511	962,500	3.1	628	178,000	1,140,500	3.9
Wyoming	122	47,000	3.0	31	9,000	56,000	3.8
York	1,580	605,500	2.9	395	112,000	717,500	3.8

APPENDIX I

ESTIMATES OF STATE REIMBURSEMENTS TO COMMUNITY COLLEGES FOR OPERATING EXPENSES AND CAPITAL OUTLAY BASED ON AMORTIZATION PLAN, 1965-66 THROUGH 1968-69

Sources and Explanatory Notes

This appendix gives the State's share of the amortization cost on the estimated capital outlay that would be needed by the community colleges established according to the priorities discussed in Part C of Section II. Capital outlay was based on an estimated $4,000 per student for the construction of a campus with complete facilities and equipment; the State's share would be one half of the amount, or $2,000 per student. Amortization costs were calculated as $50,000 yearly for each $1,000,000 outlay.

Operating expenses were calculated on the basis of $850 per student per year. This amount was distributed equally among the State, the local college district, and the student, so that the State's share would be $283. An additional amount was added to the operating expenses for part-time enrollments. It was assumed that part-time enrollments would not develop until the second year of operation. The additions are as follows: 1966-67, 10%; 1967-68, 15%; 1968-69, 20%. These percentages are included in the operating expenses shown for the second year and thereafter.

Minimum estimates assume that four community colleges will be established each year; possible estimates are based on the minimum number plus another seven or eight institutions for each of the years 1966-67, 1967-68, and 1968-69. These institutions were included if -- on the basis of the criteria discussed in Part A of Section II -- their establishment was in fact considered possible for the years indicated. For 1965-66, only one additional college --

Montgomery -- was considered possible. Montgomery has been approved and may begin its operation in February of 1966.

Each year some institutions appear in both the minimum and possible lists. Thus a particular college may be listed as possible for one year, and as both possible and minimum for the next. In such cases, however, the costs used in the two lists differ for the second year, since the college would be in its first year of operation on the minimum list and in its second year on the possible list. Costs are based on required facilities, and facilities increase as enrollments rise.

Having determined the number of colleges established each year, it was necessary to calculate the expected enrollments for each college. In some instances the college district serves only one county; in others, the district serves two or more counties. Section II, Part B, provides this information. In order to arrive at enrollment figures for each of the four years included in this appendix, reference was made to Appendix D. It was assumed that enrollments for each institution would at the outset be restricted by available facilities. It was further assumed that enrollments would increase according to the potentials shown in Appendix D. It was considered reasonable, therefore, to calculate enrollments for each district by using Formula "A" or somewhat lower enrollments for the first year, a somewhat higher figure for the second year, a figure approaching Formula "B" for the third year, and, generally, Formula "B" for the fourth year. Again, the precise figures vary according to conditions peculiar to each of the districts.

In sum, the figures in the accompanying table represent the amount needed by the State in order to pay its share of the operating expenses and of the amorization costs on the capital outlay required by the community college districts according to their projected enrollments.

APPENDIX I

ESTIMATES OF STATE REIMBURSEMENTS OF COMMUNITY COLLEGES FOR OPERATING EXPENSES AND CAPITAL OUTLAY BASED ON AMORTIZATION PLAN, 1965-66 THROUGH 1968-69

	"Minimum" Group					"Possible" Group				
				Reimbursements:					Reimbursements:	
Year	College	Yr. of Op.	Est. Enroll.	Operating Expenses	Capital Outlay	College	Yr. of Op.	Est. Enroll.	Operating Expenses	Capital Outlay
1965-66	Harrisburg*	2	1,100	$331,000	$110,000	Harrisburg*	2	1,100	$311,300	$110,000
	Philadelphia	1	1,000	283,000	100,000	Philadelphia	1	1,000	283,000	100,000
	Bucks	1	400	113,200	40,000	Bucks	1	400	113,200	40,000
	Williamsport	1	1,500	424,500	150,000	Williamsport	1	1,500	424,500	150,000
						Montgomery**	1	500	141,500	50,000
	Totals 1965-66			$1,132,000	$400,000				$1,273,500	$450,000
1966-67	Harrisburg	3	1,600	$520,720	$160,000	Harrisburg	3	1,600	$520,000	$160,000
	Philadelphia	2	1,900	591,470	190,000	Philadelphia	2	1,900	591,470	190,000
	Bucks	2	900	280,170	90,000	Bucks	2	900	280,170	90,000
	Williamsport	2	1,900	591,470	190,000	Williamsport	2	1,900	591,470	190,000
	Montgomery	1	500	141,500	50,000	Montgomery	2	1,200	373,560	120,000
	Allegheny	1	1,000	283,000	100,000	Allegheny	1	1,000	283,000	100,000
	Butler	1	250	70,750	25,000	Butler	1	250	70,750	25,000
	Beaver	1	500	141,500	50,000	Beaver	1	500	141,500	50,000
						Lehigh Valley	1	600	169,800	60,000
						Luzerne	1	600	169,800	60,000
						Delaware	1	800	226,400	80,000
						Berks	1	500	141,500	50,000
						Erie	1	600	169,800	60,000
						Mercer	1	350	99,050	35,000
						Washington	1	500	141,500	50,000
	Totals 1966-67			$2,620,600	$855,000				$3,980,490	$1,320,000

* Harrisburg, although it will be in its second year of operation, has been continued through the fifth year for capital outlay.

**Montgomery County hopes to open in February, 1966, so it is the only "possible" addition this year.

APPENDIX I (cond.)

		"Minimum" Group					"Possible" Group			
				Reimbursements:					Reimbursements:	
Year	College	Yr. of Op.	Est. Enroll.	Operating Expenses	Capital Outlay	College	Yr. of Op.	Est. Enroll.	Operating Expenses	Capital Outlay
1967-68	Harrisburg	4	2,000	$ 577,320	$200,000	Harrisburg	4	2,000	$ 577,320	$200,000
	Philadelphia	3	3,500	1,139,125	350,000	Philadelphia	3	3,500	1,139,125	350,000
	Bucks	3	1,350	436,358	135,000	Bucks	3	1,350	436,358	135,000
	Williamsport	3	2,400	781,080	240,000	Williamsport	3	2,400	781,080	240,000
	Montgomery	2	1,200	373,560	120,000	Montgomery	3	1,200	373,560	120,000
	Allegheny	2	2,000	622,600	200,000	Allegheny	2	2,000	622,600	200,000
	Butler	2	425	132,303	42,500	Butler	2	425	132,303	42,500
	Beaver	2	950	295,735	95,000	Beaver	2	950	295,735	95,000
	Lehigh Valley	1	600	169,800	60,000	Lehigh Valley	2	1,200	373,560	120,000
	Luzerne	1	600	169,800	60,000	Luzerne	2	1,200	373,560	120,000
	Delaware	1	800	226,400	80,000	Delaware	2	1,400	435,820	140,000
	Berks	1	500	141,500	50,000	Berks	2	900	280,170	90,000
						Erie	2	900	280,170	90,000
						Mercer	2	500	155,650	50,000
						Washington	2	750	233,475	75,000
						Lancaster	1	500	141,500	50,000
						Westmoreland	1	600	169,800	60,000
						Venango	1	250	70,750	25,000
						York	1	500	141,500	50,000
						Lackawanna	1	550	141,500	55,000
	Totals 1967-68			$4,065,581	$1,632,500				$7,045,536	$2,307,000
1968-69	Harrisburg	5	2,700	$ 916,920	$ 270,000	Harrisburg	5	2,700	$ 916,920	$ 270,000
	Philadelphia	4	5,000	1,698,000	500,000	Philadelphia	4	5,000	1,698,000	500,000
	Bucks	4	1,800	611,280	180,000	Bucks	4	1,800	611,280	180,000
	Williamsport	4	3,000	1,018,800	300,000	Williamsport	4	3,000	1,018,800	300,000
	Montgomery	3	1,800	585,810	180,000	Montgomery	4	1,800	585,810	180,000
	Allegheny	3	3,500	1,139,750	350,000	Allegheny	3	3,500	1,139,750	350,000
	Butler	3	500	162,725	50,000	Butler	3	500	162,725	50,000
	Beaver	3	1,200	390,540	120,000	Beaver	3	1,200	390,540	120,000
	Lehigh Valley	2	1,200	373,560	120,000	Lehigh Valley	3	1,800	586,431	180,000

APPENDIX I (cond.)

		"Minimum" Group					"Possible" Group			
				Reimbursements:					Reimbursements:	
Year	College	Yr. of Op.	Est. Enroll.	Operating Expenses	Capital Outlay	College	Yr. of Op.	Est. Enroll.	Operating Expenses	Capital Outlay
1968-69	Luzerne	2	1,200	373,560	120,000	Luzerne	3	1,600	521,272	160,000
	Delaware	2	1,400	435,820	140,000	Delaware	3	2,000	650,900	200,000
	Berks	2	900	280,170	90,000	Berks	3	1,500	488,693	150,000
	Erie	1	600	169,800	60,000	Erie	3	1,300	405,119	130,000
	Mercer	1	350	99,050	35,000	Mercer	3	700	228,057	70,000
	Washington	1	500	141,500	50,000	Washington	3	1,100	358,375	110,000
	Lancaster	1	500	141,500	50,000	Lancaster	2	1,000	325,450	100,000
						Westmoreland	2	900	280,170	90,000
						Venango	2	400	124,520	40,000
						York	2	900	280,170	90,000
						Lackawanna	2	800	226,400	80,000
						Cambria	1	450	127,350	45,000
						Cameron	1	200	56,000	20,000
						Chester	1	500	141,500	50,000
						Indiana	1	250	70,750	25,000
		Totals 1968-69		$8,438,785	$2,615,000				$11,385,582	$3,490,000

APPENDIX J

ESTIMATES OF AMOUNTS NEEDED YEARLY FOR STATE REIMBURSEMENT ON A CASH BASIS FOR COMMUNITY COLLEGE CAPITAL OUTLAY, 1965-66 THROUGH 1968-69

Sources and Explanatory Notes

The figures in the accompanying table represent the actual amounts needed annually by the Commonwealth in order to reimburse the community colleges, on a cash basis, for the State's share of the capital outlay.

The selection of specific colleges and the estimated enrollments for each college are the same as those for Appendix I, and are therefore discussed in the Explanatory Notes at the beginning of that appendix.

It is assumed that for the first three years of operation -- although this could vary for some institutions -- the colleges will probably be housed in rented quarters. The amounts shown for rental, however, should be read to include rental, necessary renovation, and equipment. Rental costs are based on the enrollments estimated for each of the first three years of operation.

In some instances, colleges may be sponsored by and serve a single county; in other cases, they may be sponsored by and serve several counties. Thus enrollments represent the potentials of one or more counties, as the case may be. The county or counties comprising each community college district, or area, are given in Parts B and C of Section II.

It is also assumed that the colleges will begin their building programs in the second year of their existence. Total capital outlay is based on the 1970 projected full-time enrollments for each of the colleges. Since it is assumed that the building programs based on 1970 enrollments will be completed by that year -- or four years after their inception -- the amounts shown for annual capital needs represent one-fourth of the total capital needs.

APPENDIX J

ESTIMATES OF AMOUNTS NEEDED YEARLY FOR STATE REIMBUSEMENT ON A CASH BASIS

FOR COMMUNITY COLLEGE CAPITAL OUTLAY, 1965-66 THROUGH 1968-69

	"Minimum" Group					"Possible" Group				
Year	College	Yr. of Op.	Est. Enroll.	Needed Rental	Needed Capital	College	Yr. of Op.	Est. Enroll.	Needed Rental	Needed Capital
1956-66	Harrisburg	2	1,100	$110,000	$560,300	Harrisburg	2	1,100	$110,000	$560,300
	Philadelphia	1	1,000	100,000	823,300	Philadelphia	1	1,000	100,000	823,300
	Bucks	1	400	40,000	800,000	Bucks	1	400	40,000	800,000
	Williamsport	1	1,500	150,000	15,000	Williamsport	1	1,500	150,000	15,000
						Montgomery	1	500	50,000	
	Totals			$400,000	$2,198,600				$450,000	$2,198,600
1966-67	Harrisburg	3	1,600	$160,000	$1,500,000	Harrisburg	3	1,600	$160,000	$1,500,000
	Philadelphia	2	1,900	190,000	4,250,000	Philadelphia	2	1,900	190,000	4,250,000
	Bucks	2	900	90,000	1,500,000	Bucks	2	900	90,000	1,500,000
	Williamsport	2	1,900	190,000	1,600,000	Williamsport	2	1,900	190,000	1,600,000
	Montgomery	1	500	50,000		Montgomery	2	1,200	120,000	1,750,000
	Allegheny	1	1,000	100,000		Allegheny	1	1,000	100,000	
	Butler	1	250	25,000		Butler	1	250	25,000	
	Beaver	1	500	50,000		Beaver	1	500	50,000	
						Lehigh Valley	1	600	60,000	
						Luzerne	1	600	60,000	
						Delaware	1	800	80,000	
						Berks	1	500	50,000	
						Erie	1	600	60,000	
						Mercer	1	350	35,000	
						Washington	1	500	50,000	
	Totals 1966-67			$855,000	$8,850,000				$1,320,000	$10,600,000
1967-68	Harrisburg	4	2,000		$1,500,000	Harrisburg	4	2,000		1,500,000
	Philadelphia	3	3,500	350,000	4,250,000	Philadelphia	3	3,500	350,000	4,250,000
	Bucks	3	1,350	135,000	1,500,000	Bucks	3	1,350	135,000	1,500,000
	Williamsport	3	2,400	240,000	1,600,000	Williamsport	3	2,400	240,000	1,600,000
	Montgomery	2	1,200	120,000	1,750,000	Montgomery	3	1,200	180,000	1,750,000

APPENDIX J (cond.)

	"Minimum" Group					"Possible" Group				
Year	College	Yr. of Op.	Est. Enroll.	Needed Rental	Needed Capital	College	Yr. of Op.	Est. Enroll.	Needed Rental	Needed Capital
1967-68	Allegheny	2	2,000	$200,000	$4,250,000	Allegheny	2	2,000	$200,000	$4,250,000
	Butler	2	425	42,500	400,000	Butler	2	425	42,000	400,000
	Beaver	2	950	95,000	1,000,000	Beaver	2	950	95,000	1,000,000
	Lehigh Valley	1	600	60,000		Lehigh Valley	2	1,200	120,000	1,300,000
	Luzerne	1	600	60,000		Luzerne	2	1,200	120,000	1,250,000
	Delaware	1	800	80,000		Delaware	2	1,400	140,000	1,750,000
	Berks	1	500	50,000		Berks	2	900	90,000	1,250,000
						Erie	2	900	90,000	1,000,000
						Mercer	2	500	50,000	600,000
						Washington	2	750	75,000	750,000
						Lancaster	1	500	50,000	
						Westmoreland	1	600	60,000	
						Venango	1	250	25,000	
						York	1	500	25,000	
						Lackawanna	1	550	50,000	
Totals 1967-68				$1,432,500	$16,250,000				$2,137,000	$24,150,000
1968-69	Harrisburg	5	2,700		$1,500,000	Harrisburg	5	2,700		$1,500,000
	Philadelphia	4	5,000		4,250,000	Philadelphia	4	5,000		4,250,000
	Bucks	4	1,800		1,500,000	Bucks	4	1,800		1,500,000
	Williamsport	4	3,000		1,600,000	Williamsport	4	3,000		1,600,000
	Montgomery	3	1,800	180,000	1,750,000	Montgomery	4	1,800		1,750,000
	Allegheny	3	3,500	350,000	4,250,000	Allegheny	3	3,500	350,000	4,250,000
	Butler	3	500	50,000	400,000	Butler	3	500	50,000	400,000
	Beaver	3	1,200	120,000	1,000,000	Beaver	3	1,200	120,000	1,000,000
	Lehigh Valley	2	1,200	120,000	1,300,000	Lehigh Valley	3	1,800	180,000	1,300,000
	Luzerne	2	1,200	120,000	1,250,000	Luzerne	3	1,600	160,000	1,250,000
	Delaware	2	1,400	140,000	1,750,000	Delaware	3	2,000	200,000	1,750,000
	Berks	2	900	90,000	1,250,000	Berks	3	1,500	150,000	1,250,000
	Erie	1	600	60,000		Erie	3	1,300	130,000	1,000,000
	Mercer	1	350	35,000		Mercer	3	700	70,000	600,000
	Washington	1	500	50,000		Washington	3	1,100	110,000	750,000

APPENDIX J (cond.)

	"Minimum" Group					"Possible" Group				
Year	College	Yr. of Op.	Est. Enroll.	Needed Rental	Needed Capital	College	Yr. of Op.	Est. Enroll.	Needed Rental	Needed Capital
1968-69	Lancaster	1	500	$ 50,000		Lancaster	2	1,000	$100,000	$ 900,000
						Westmoreland	2	900	90,000	1,250,000
						Venango	2	400	40,000	350,000
						York	2	900	90,000	1,000,000
						Lackawanna	2	800	80,000	900,000
						Cambria	1	450	45,000	
						Cameron	1	200	20,000	
						Chester	1	500	50,000	
						Indiana	1	250	25,000	
	Totals 1968-69			$1,365,000	$21,800,000				$2,060,000	$28,550,000

APPENDIX K

ENROLLMENTS IN OFF-CAMPUS EXTENSION CENTERS, FALL 1964

Center	No.	Full-Time Enrollment	Part-Time Enrollment	Total Enrollment
State College Extension Centers	7	687	268	955
Pennsylvania State University Commonwealth Campuses	14			5,306*
University of Pittsburgh Regional Colleges	4	1,278	1,018	2,296
University of Pennsylvania Centers	4		138	138
Temple University Centers	2		299	299
Totals	31	1,965	1,723	8,994

*Resident degree students -- includes day and evening sessions and adjunct students.

Note: The Harrisburg Area Center is not included in this table.

Source: Compiled from data provided by Department of Public Instruction, Bureau of Research, and by Pennsylvania State University.